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PASSWORD:

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\* \* \* \* \* \* \* \* \* Welcome to STN International \* \* \* \* \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America

NEWS 2 Apr 08 "Ask CAS" for self-help around the clock

NEWS 3 Apr 09 BEILSTEIN: Reload and Implementation of a New Subject Area

NEWS 4 Apr 09 ZDB will be removed from STN

NEWS 5 Apr 19 US Patent Applications available in IFICDB, IFIPAT, and IFIUDB

NEWS 6 Apr 22 Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS

NEWS 7 Apr 22 BIOSIS Gene Names now available in TOXCENTER

NEWS 8 Apr 22 Federal Research in Progress (FEDRIP) now available

NEWS 9 Jun 03 New e-mail delivery for search results now available

NEWS 10 Jun 10 MEDLINE Reload

NEWS 11 Jun 10 PCTFULL has been reloaded

NEWS 12 Jul 02 FOREGE no longer contains STANDARDS file segment

NEWS 13 Jul 22 USAN to be reloaded July 28, 2002;  
saved answer sets no longer valid

NEWS 14 Jul 29 Enhanced polymer searching in REGISTRY

NEWS 15 Jul 30 NETFIRST to be removed from STN

NEWS 16 Aug 08 CANCERLIT reload

NEWS 17 Aug 08 PHARMAMarketLetter (PHARMAML) - new on STN

NEWS 18 Aug 08 NTIS has been reloaded and enhanced

NEWS 19 Aug 19 Aquatic Toxicity Information Retrieval (AQUIRE)  
now available on STN

NEWS 20 Aug 19 IFIPAT, IFICDB, and IFIUDB have been reloaded

NEWS 21 Aug 19 The MEDLINE file segment of TOXCENTER has been reloaded

NEWS 22 Aug 26 Sequence searching in REGISTRY enhanced

NEWS 23 Sep 03 JAPIO has been reloaded and enhanced

NEWS 24 Sep 16 Experimental properties added to the REGISTRY file

NEWS 25 Sep 16 Indexing added to some pre-1967 records in CA/CAPLUS

NEWS 26 Sep 16 CA Section Thesaurus available in CAPLUS and CA

NEWS 27 Oct 01 CASREACT Enriched with Reactions from 1907 to 1985

NEWS EXPRESS October 14 CURRENT WINDOWS VERSION IS V6.01,  
CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),  
AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002

NEWS HOURS STN Operating Hours Plus Help Desk Availability

NEWS INTER General Internet Information

NEWS LOGIN Welcome Banner and News Items

NEWS PHONE Direct Dial and Telecommunication Network Access to STN

NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 12:43:00 ON 17 OCT 2002

=> file reg COST IN U.S. DOLLARS FULL ESTIMATED COST	SINCE FILE ENTRY 0.63	TOTAL SESSION 0.63
------------------------------------------------------------	-----------------------------	--------------------------

FILE 'REGISTRY' ENTERED AT 12:44:28 ON 17 OCT 2002  
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Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 16 OCT 2002 HIGHEST RN 462058-01-1  
DICTIONARY FILE UPDATES: 16 OCT 2002 HIGHEST RN 462058-01-1

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP  
PROPERTIES for more information. See STNote 27, Searching Properties  
in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

```
=> s indomethacin
L1      51 INDOMETHACIN

=> s naproxen
L2      75 NAPROXEN

=> s nimesulide
L3      6 NIMESULIDE

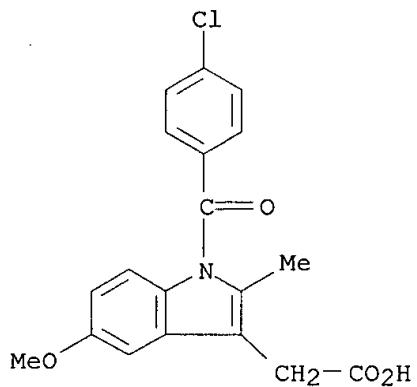
=> s nitroglycerin
L4      13 NITROGLYCERIN

=> s nitric oxide
      3362 NITRIC
      540527 OXIDE
L5      443 NITRIC OXIDE
      (NITRIC(W) OXIDE)
```

=> d 11 51

```
L1  ANSWER 51 OF 51  REGISTRY  COPYRIGHT 2002 ACS
RN  53-86-1  REGISTRY
CN  1H-Indole-3-acetic acid, 1-(4-chlorobenzoyl)-5-methoxy-2-methyl- (9CI)
    (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN  Indole-3-acetic acid, 1-(p-chlorobenzoyl)-5-methoxy-2-methyl- (8CI)
OTHER NAMES:
CN  .alpha.-[1-(p-Chlorobenzoyl)-2-methyl-5-methoxy-3-indolyl]acetic acid
CN  1-(4-Chlorobenzoyl)-2-methyl-5-methoxyindole-3-acetic acid
```

CN 1-(4-Chlorobenzoyl)-5-methoxy-2-methylindole-3-acetic acid  
CN 1-(p-Chlorobenzoyl)-2-methyl-5-methoxy-3-indolylacetic acid  
CN 1-(p-Chlorobenzoyl)-2-methyl-5-methoxyindole-3-acetic acid  
CN 1-(p-Chlorobenzoyl)-5-methoxy-2-methyl-3-indolylacetic acid  
CN 1-(p-Chlorobenzoyl)-5-methoxy-2-methylindole-3-acetic acid  
CN Amuno  
CN Artrinovo  
CN Artrivia  
CN Bonidon Gel  
CN Chrono-Indocid 75  
CN Confortid  
CN Dolcidium PL  
CN Dolovin  
CN Idomethine  
CN Inacid  
CN Indacin  
CN Indo-Rectolmin  
CN Indocid  
CN Indocin  
CN Indomecol  
CN Indomed  
CN Indomee  
CN Indometacin  
CN Indometacine  
**CN Indomethacin**  
CN Indomethacine  
CN Indren  
CN Infrocin  
CN Inteban  
CN Metacen  
CN Metartril  
CN Methazine  
CN Metindol  
CN Mezolin  
CN N-(p-Chlorobenzoyl)-2-methyl-5-methoxy-3-indolylacetic acid  
CN Reumacide  
CN Sadoreum  
FS 3D CONCORD  
DR 37242-43-6, 91853-74-6  
MF C19 H16 Cl N O4  
CI COM  
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOBUSINESS,  
BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB,  
CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES,  
DRUGPAT, DRUGU, EMBASE, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE,  
MRCK\*, MSDS-OHS, NIOSHTIC, PHAR, PHARMASEARCH, PROMT, RTECS\*, SPECINFO,  
SYNTHLINE, TOXCENTER, ULIDAT, USAN, USPAT2, USPATFULL, VETU  
(\*File contains numerically searchable property data)  
Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*, WHO  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

11952 REFERENCES IN FILE CA (1962 TO DATE)  
 147 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 11967 REFERENCES IN FILE CAPLUS (1962 TO DATE)  
 60 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> d 12 75

L2 ANSWER 75 OF 75 REGISTRY COPYRIGHT 2002 ACS  
 RN 9016-18-6 REGISTRY  
 CN Esterase, carboxyl (8CI, 9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN .alpha.-Carboxylesterase  
 CN .alpha.-Esterase  
 CN .beta.-Esterase  
 CN 1,4-Butanediol diacrylate esterase  
 CN 7-Amino-3-methoxy-3-cephem-4-carboxyl ester hydrolase  
 CN Aliesterase  
 CN Aminoacyl esterase  
 CN B-Esterase  
 CN Butyrate esterase  
 CN Butyryl esterase  
 CN Carbonic esterase  
 CN Carboxyesterase  
 CN Carboxyl ester hydrolase  
 CN Carboxyl ester lipase  
 CN Carboxyl esterase  
 CN Carboxylate esterase  
 CN Carboxylesterase B  
 CN Carboxylesterase ES-1  
 CN Carboxylic acid esterase  
 CN Carboxylic ester hydrolase  
 CN Carboxylic esterase  
 CN Chirazyme E 1  
 CN Cinnamate esterase  
 CN Cinnamic acid esterase  
 CN Cinnamoyl ester hydrolase  
 CN Cinnamoyl esterase  
 CN E.C. 3.1.1.1  
 CN E.C. 3.1.1.12  
 CN Egasyn  
 CN Esterase  
 CN Esterase 29

CN Esterase EP10  
CN Esterase, B-  
CN Fatty acid ethyl ester hydrolase  
CN Fluazifop-butyl esterase  
CN Ketoprofen alkyl esterase  
CN Ketoprofen choline esterase  
CN Methyl farnesoate esterase  
CN Methylbutyrase  
CN Methylbutyrate esterase  
CN Monobutyrase  
CN **Naproxen esterase**  
CN Neutral esterase  
CN Nonspecific carboxylesterase  
CN Phthalate ester hydrolase  
CN Phthalate esterase  
CN Procaine esterase  
CN Propionyl esterase  
CN Prostaglandin A2 methylesterase  
CN Proteins, egasyns

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for  
DISPLAY

DR 9025-97-2, 9027-84-3, 114514-18-0, 139074-54-7

MF Unspecified

CI MAN

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO,  
CA, CABAB, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN,  
CSNB, EMBASE, IFICDB, IFIPAT, IFIUDB, MSDS-OHS, PIRA, PROMT, TOXCENTER,  
USPAT2, USPATFULL

Other Sources: EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

3152 REFERENCES IN FILE CA (1962 TO DATE)

33 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

3162 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> d 12 74

L2 ANSWER 74 OF 75 REGISTRY COPYRIGHT 2002 ACS  
RN 22204-53-1 REGISTRY  
CN 2-Naphthaleneacetic acid, 6-methoxy-.alpha.-methyl-, (.alpha.S)- (9CI)  
(CA INDEX NAME)

OTHER CA INDEX NAMES:

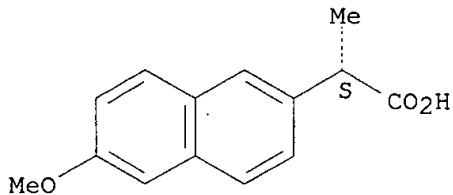
CN 2-Naphthaleneacetic acid, 6-methoxy-.alpha.-methyl-, (S)-  
CN 2-Naphthaleneacetic acid, 6-methoxy-.alpha.-methyl-, (+)- (8CI)

OTHER NAMES:

CN **(+)-(S)-Naproxen**  
CN (+)-2-(6-Methoxy-2-naphthyl)propionic acid  
CN (+)-6-Methoxy-.alpha.-methyl-2-naphthaleneacetic acid  
CN **(+)-Naproxen**  
CN (S)-(+)2-(6-Methoxy-2-naphthyl)propionic acid  
CN **(S)-(+)-Naproxen**  
CN (S)-(+)Naproxene  
CN (S)-2-(6-Methoxy-2-naphthyl)propanoic acid  
CN (S)-2-(6-Methoxy-2-naphthyl)propionic acid  
CN (S)-6-Methoxy-.alpha.-methyl-2-naphthaleneacetic acid  
CN **(S)-Naproxen**  
CN **Apo-Naproxen**  
CN CG 3117  
CN d-2-(6-Methoxy-2-naphthyl)propionic acid  
CN **d-Naproxen**

CN      Equiproxen  
 CN      Naixan  
 CN      Naprosyn  
 CN      **Naproxen**  
 FS      STEREOSEARCH  
 MF      C14 H14 O3  
 CI      COM  
 LC      STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN\*,  
         BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB,  
         CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DETHERM\*,  
         DIOGENES, DRUGPAT, DRUGU, EMBASE, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA,  
         MEDLINE, MRCK\*, MSDS-OHS, PHAR, PHARMASEARCH, PROMT, RTECS\*, SPECINFO,  
         SYNTHLINE, TOXCENTER, ULIDAT, USAN, USPAT2, USPATFULL, VETU  
         (\*File contains numerically searchable property data)  
 Other Sources: EINECS\*\*, WHO  
         (\*\*Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry. Rotation (+).



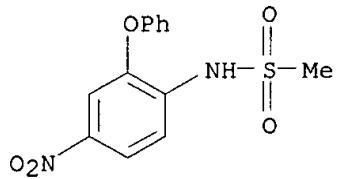
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

3301 REFERENCES IN FILE CA (1962 TO DATE)  
 135 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 3312 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> d 13 6

L3      ANSWER 6 OF 6 REGISTRY COPYRIGHT 2002 ACS  
 RN      51803-78-2 REGISTRY  
 CN      Methanesulfonamide, N-(4-nitro-2-phenoxyphenyl)- (9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN      2-Phenoxy-4-nitromethanesulfonanilide  
 CN      4'-Nitro-2'-phenoxyethanesulfonanilide  
 CN      4-Nitro-2-phenoxyethanesulfonanilide  
 CN      Aulin  
 CN      Mesulid  
 CN      Nimepast  
 CN      **Nimesulide**  
 CN      Nisulid  
 CN      R 805  
 CN      R 805 (pharmaceutical)  
 FS      3D CONCORD  
 MF      C13 H12 N2 O5 S  
 CI      COM  
 LC      STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
         BIOTECHNO, CA, CANCERLIT, CAPLUS, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM,  
         DDFU, DETHERM\*, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, IPA,  
         MEDLINE, MRCK\*, PHAR, PHARMASEARCH, PROMT, RTECS\*, SYNTHLINE, TOXCENTER,  
         USAN, USPATFULL, VETU  
         (\*File contains numerically searchable property data)  
 Other Sources: EINECS\*\*, WHO

(\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

541 REFERENCES IN FILE CA (1962 TO DATE)  
19 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
548 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> d his

(FILE 'HOME' ENTERED AT 12:43:00 ON 17 OCT 2002)

FILE 'REGISTRY' ENTERED AT 12:44:28 ON 17 OCT 2002

L1 51 S INDOMETHACIN  
L2 75 S NAPROXEN  
L3 6 S NIMESULIDE  
L4 13 S NITROGLYCERIN  
L5 443 S NITRIC OXIDE

=> d 14 13

L4 ANSWER 13 OF 13 REGISTRY COPYRIGHT 2002 ACS  
RN 55-63-0 REGISTRY  
CN 1,2,3-Propanetriol, trinitrate (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Nitroglycerin (8CI)  
OTHER NAMES:  
CN 1,2,3-Propanetriyl nitrate  
CN Angibid  
CN Anginine  
CN Angiolingual  
CN Angorin  
CN Blasting oil  
CN Cardamist  
CN Chitamate  
CN Deponit  
CN Epinitril  
CN Gilucor nitro  
CN Glonoin  
CN Glycerin trinitrate  
CN Glycerol trinitrate  
CN Glyceryl nitrate  
CN Glyceryl trinitrate  
CN GTN  
CN Klavikordal  
CN Lenitral  
CN Minitran  
CN Minitran (nitroglycerin)  
CN Myoglycerin

CN NG  
CN Niglin  
CN Niglycon  
CN Nitora  
CN Nitrin  
CN Nitrine  
CN Nitrine-TDC  
CN Nitro-Bid  
CN Nitro-Dur  
CN Nitro-lent  
CN Nitro-Span  
CN Nitrocardin  
CN Nitroderm  
CN Nitroglycerine  
CN Nitroglycerol  
CN Nitroglyn  
CN Nitrol  
CN Nitrol (pharmaceutical)  
CN Nitrolan  
CN Nitroletten  
CN Nitrolingual  
CN Nitrolowe  
CN Nitromel  
CN Nitrong  
CN Nitropercuten  
CN Nitrorectal  
CN Nitroretard  
CN **Trinitroglycerin**

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for  
DISPLAY

FS 3D CONCORD

DR 8013-23-8, 9010-02-0, 105469-31-6, 80066-48-4

MF C3 H5 N3 O9

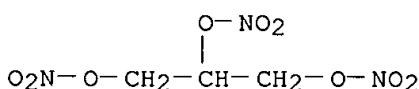
CI COM

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOBUSINESS,  
BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN,  
CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU,  
DETERM\*, DIOGENES, DIPPR\*, DRUGNL, DRUGU, DRUGUPDATES, EMBASE, GMELIN\*,  
HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS,  
NIOSHTIC, PDLCOM\*, PHAR, PHARMASEARCH, PIRA, PROMT, RTECS\*, SPECINFO,  
TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VETU, VTB

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

5967 REFERENCES IN FILE CA (1962 TO DATE)

30 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

5974 REFERENCES IN FILE CAPLUS (1962 TO DATE)

7 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file caplus  
COST IN U.S. DOLLARS

SINCE FILE TOTAL

FULL ESTIMATED COST

ENTRY      SESSION  
34.56      35.19

FILE 'CAPLUS' ENTERED AT 12:48:44 ON 17 OCT 2002  
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FILE COVERS 1907 - 17 Oct 2002 VOL 137 ISS 16  
FILE LAST UPDATED: 16 Oct 2002 (20021016/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> e micturition

E1	3	MICTURES/BI
E2	1	MICTURINATION/BI
E3	843 -->	MICTURITION/BI
E4	9	MICTURITIONAL/BI
E5	2	MICTURITIONARY/BI
E6	26	MICTURITIONS/BI
E7	1	MICTURITRON/BI
E8	1	MICTUSTRUCTURES/BI
E9	1	MICTYRIDAE/BI
E10	10	MICTYRIS/BI
E11	9	MICU/BI
E12	1	MICU2/BI

=> se3-e6

SE3-E6 IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.  
For a list of commands available to you in the current file, enter  
"HELP COMMANDS" at an arrow prompt (=>).

=> s e3-e6

843	MICTURITION/BI
9	MICTURITIONAL/BI
2	MICTURITIONARY/BI
26	MICTURITIONS/BI
L6	861 (MICTURITION/BI OR MICTURITIONAL/BI OR MICTURITIONARY/BI OR MICTURITIONS/BI)

=> e bladder

E1	3	BLADDED/BI
E2	1	BLADDELEITE/BI
E3	24458 -->	BLADDER/BI

E4 1 BLADDERØ/BI  
E5 4 BLADDERED/BI  
E6 1 BLADDERER/BI  
E7 1 BLADDERFISTULATED/BI  
E8 1 BLADDERING/BI  
E9 9 BLADDERLESS/BI  
E10 4 BLADDERNUT/BI  
E11 1 BLADDERNUTS/BI  
E12 1 BLADDEROF/BI

=> s e3  
L7 24458 BLADDER/BI

=> e incontinence  
E1 1 INCONTIGUOUS/BI  
E2 1 INCONTINANCE/BI  
E3 1957 --> INCONTINENCE/BI  
E4 2 INCONTINENCEGUARD/BI  
E5 1 INCONTINENCESUPPLIES/BI  
E6 1 INCONTINENCY/BI  
E7 103 INCONTINENT/BI  
E8 42 INCONTINENTIA/BI  
E9 1 INCONTINENTS/BI  
E10 1 INCONTINUE/BI  
E11 6 INCONTINUITY/BI  
E12 6 INCONTINUOUS/BI

=> s e3-e7  
1957 INCONTINENCE/BI  
2 INCONTINENCEGUARD/BI  
1 INCONTINENCESUPPLIES/BI  
1 INCONTINENCY/BI  
103 INCONTINENT/BI  
L8 2013 (INCONTINENCE/BI OR INCONTINENCEGUARD/BI OR INCONTINENCESUPPLIES  
/BI OR INCONTINENCY/BI OR INCONTINENT/BI)

=> e urinary  
E1 1 URINARILY/BI  
E2 1 URINARIS/BI  
E3 107957 --> URINARY/BI  
E4 1 URINARYALBUMIN/BI  
E5 1 URINARYCONCNS/BI  
E6 3 URINARYEXCRETION/BI  
E7 1 URINARYHYDROXYPROLINE/BI  
E8 1 URINARYK/BI  
E9 1 URINARYKYNURENINE/BI  
E10 4 URINARYL/BI  
E11 1 URINARYLYL/BI  
E12 1 URINARYMUCOPROTEINS/BI

=> s e3  
L9 107957 URINARY/BI

=> s l4  
L10 6048 L4

=> s l5  
L11 76683 L5

=> s l6 and l10  
L12 1 L6 AND L10

=> d 112 all

L12 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS  
AN 1999:403617 CAPLUS  
DN 131:179779  
TI Effect of K<sup>+</sup> channel openers, KRN2391 and Ki1769, and nitroglycerin on the urinary tract of rats *in vivo*  
AU Kontani, Hitoshi; Jinkawa, Masumi; Shiraoya, Chisato; Nagashima, Akiko  
CS Department of Pharmacology, Faculty of Pharmaceutical Sciences, Hokuriku University, Kanazawa, 920-1181, Japan  
SO Japanese Journal of Pharmacology (1999), 80(2), 143-153  
CODEN: JJPAAZ; ISSN: 0021-5198  
PB Japanese Pharmacological Society  
DT Journal  
LA English  
CC 1-12 (Pharmacology)  
AB The effects of KRN2391 (N-cyano-'N-(nitroxyethyl)-3-pyridine carboximidamide methanesulfonate), which possesses ATP-sensitive potassium (K<sup>+</sup>) channel opening (KCO) activity and nitrate activity; Ki1769 (N-cyano-'N-(phenylethyl)-3-pyridinecarboximidamide methanesulfonate), which possesses only KCO activity; and nitroglycerin (NG) were detd. on the motility of the ureter, urinary bladder and urethra of rats. Bladder contraction was induced by infusion of fluid into the bladder of conscious rats and recorded on a cystometrogram. KRN2391 and Ki1769 (both 0.3 mg/kg, i.v.) prolonged the **micturition** interval immediately after the injection, but NG (5 mg/kg, i.v.) did not. Peristaltic movement of the ureter, recorded in anesthetized rats, was inhibited by i.v. injection of KRN2391 and Ki1769 (both 0.03 mg/kg). However, when NG, NaNO<sub>2</sub>, N-nitro L-arginine methylester and methylene blue were applied directly to the ureter, no change in movement of the ureter was detected. KRN2391 (0.03 mg/kg, i.v.) and Ki1769 (0.3 mg/kg, i.v.) reduced the resistance to fluid infusion through the urethral lumen in anesthetized rats, whereas NG (0.5 mg/kg, i.v.) only reduced this resistance transiently. These results indicate that KCO activity had an inhibitory effect on the motility of the ureter, bladder and urethra. On the other hand, nitrate activity had a inhibitory effect on urethral tonus, corresponding to that induced by KCO activity.  
ST urinary tract potassium channel opener nitroglycerin  
IT Urinary tract  
(effect of K<sup>+</sup> channel openers and nitroglycerin on urinary tract)  
IT Ion channel openers  
(potassium; effect of K<sup>+</sup> channel openers and nitroglycerin on urinary tract)  
IT 55-63-0, Nitroglycerin 133300-00-2, Ki1769 134431-49-5,  
KRN2391  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(effect of K<sup>+</sup> channel openers and nitroglycerin on urinary tract)  
RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD  
RE  
(1) Alm, P; J Auton Nerv Sys 1995, V56, P105 CAPLUS  
(2) Bennett, B; J Urol 1995, V153, P2004 MEDLINE  
(3) Chung, B; J Urol 1996, V155, P2090 CAPLUS  
(4) Foster, C; Br J Pharmacol 1989, V97, P281 CAPLUS  
(5) Howe, B; J Pharmacol Exp Ther 1995, V274, P884 CAPLUS  
(6) Hux, X; Neuroscience 1987, V23, P693  
(7) Ishibashi, T; Naunyn Schmiedebergs Arch Pharmacol 1992, V346, P94 CAPLUS  
(8) Jinno, Y; Br J Pharmacol 1992, V106, P906 CAPLUS  
(9) Kashiwabara, T; Eur J Pharmacol 1990, V183, P1266P  
(10) Kashiwabara, T; Eur J Pharmacol 1991, V196, P1 CAPLUS  
(11) Kontani, H; Int J Urol 1997, V4, P394 MEDLINE

- (12) Kontani, H; Jpn J Pharmacol 1988, V48, P31 CAPLUS
- (13) Kontani, H; Jpn J Pharmacol 1990, V53, P427 CAPLUS
- (14) Kontani, H; Jpn J Pharmacol 1993, V62, P331 CAPLUS
- (15) Kontani, H; Jpn J Pharmacol 1993, V63, P503 CAPLUS
- (16) Maggi, C; J Pharmacol Exp Ther 1988, V246, P308 CAPLUS
- (17) Malmgren, A; J Urol 1989, V142, P1134
- (18) Okada, Y; Eur J Pharmacol 1993, V241, P177 CAPLUS
- (19) Persson, K; Acta Physiol Scand 1991, V144, P107
- (20) Persson, K; Br J Pharmacol 1992, V107, P178 CAPLUS
- (21) Waldeck, K; Gen Pharmacol 1995, V26, P1559 CAPLUS
- (22) Yokoyama, T; Gen Pharmacol 1994, V25, P941 CAPLUS

=> s 16 and l11  
L13            27 L6 AND L11

=> d 113 10-27

L13 ANSWER 10 OF 27 CAPLUS COPYRIGHT 2002 ACS  
AN 1999:338885 CAPLUS  
DN 131:142389  
TI Co-localization of carbon monoxide and nitric oxide synthesizing enzymes in the human urethral sphincter  
AU Ho, Kossen M. T.; Ny, Lars; McMurray, Gordon; Andersson, Karl-Erik; Brading, Alison F.; Noble, Jeremy G.  
CS Oxford Continence Group, Department of Urology, The Churchill Hospital, Oxford, UK  
SO Journal of Urology (Baltimore) (1999), 161(6), 1968-1972  
CODEN: JOURAA; ISSN: 0022-5347  
PB Lippincott Williams & Wilkins  
DT Journal  
LA English  
RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 11 OF 27 CAPLUS COPYRIGHT 2002 ACS  
AN 1998:383264 CAPLUS  
DN 129:104501  
TI Oxytocin-induced stimulation and inhibition of bladder activity in normal, conscious rats-influence of nitric oxide synthase inhibition  
AU Pandita, R. K.; Nylen, A.; Andersson, K. -E.  
CS Department of Clinical Pharmacology, Lund University Hospital, Lund, Swed.  
SO Neuroscience (Oxford) (1998), 85(4), 1113-1119  
CODEN: NRSCDN; ISSN: 0306-4522  
PB Elsevier Science Ltd.  
DT Journal  
LA English

L13 ANSWER 12 OF 27 CAPLUS COPYRIGHT 2002 ACS  
AN 1998:248002 CAPLUS  
DN 129:76914  
TI Colocalization of nitric oxide synthase and some neurotransmitters in the intramural ganglia of the guinea pig urinary bladder  
AU Zhou, Yuan; Ling, Eng-Ang  
CS Department of Anatomy, Faculty of Medicine, National University of Singapore, 119260, Singapore  
SO Journal of Comparative Neurology (1998), 394(4), 496-505  
CODEN: JCNEAM; ISSN: 0021-9967  
PB Wiley-Liss, Inc.  
DT Journal  
LA English

L13 ANSWER 13 OF 27 CAPLUS COPYRIGHT 2002 ACS  
 AN 1998:197390 CAPLUS  
 DN 128:253008  
 TI Pharmaceutical compositions and methods using alcohols and analogs thereof for regulation of melanin content and treatment of skin and other diseases  
 IN Brown, David A.; Khorlin, Alexander A.; Lesiak, Krystyna; Ren, Wu Yun  
 PA Codon Pharmaceuticals, Inc., USA  
 SO PCT Int. Appl., 100 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9811882	A1	19980326	WO 1997-US16642	19970918
	W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9745842	A1	19980414	AU 1997-45842	19970918
	AU 740783	B2	20011115		
	US 5990177	A	19991123	US 1997-933144	19970918
	EP 957903	A1	19991124	EP 1997-944319	19970918
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	US 6110975	A	20000829	US 1997-933145	19970918
	WO 9855085	A1	19981210	WO 1998-US5346	19980318
	W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9865659	A1	19981221	AU 1998-65659	19980318
	US 6214888	B1	20010410	US 1998-86547	19980528
	US 6290937	B1	20010918	US 1998-85917	19980528
	US 2002141952	A1	20021003		
PRAI	US 1996-26577P	P	19960918		
	US 1997-35947P	P	19970121		
	US 1997-36863P	P	19970204		
	US 1997-48597P	P	19970604		
	US 1997-933143	B2	19970918		
	WO 1997-US16642	W	19970918		
	WO 1998-US5346	W	19980318		
OS	MARPAT	128:253008			

L13 ANSWER 14 OF 27 CAPLUS COPYRIGHT 2002 ACS  
 AN 1997:808611 CAPLUS  
 DN 128:149538  
 TI Capsaicin-induced bladder overactivity and nociceptive behavior in conscious rats: Involvement of spinal nitric oxide  
 AU Pandita, Raj Kumar; Persson, Katarina; Andersson, Karl-Erik  
 CS Department of Clinical Pharmacology, Lund University Hospital, 221 85 Lund, Swed.  
 SO Journal of the Autonomic Nervous System (1997), 67(3), 184-191  
 CODEN: JASYDS; ISSN: 0165-1838  
 PB Elsevier Science B.V.  
 DT Journal

LA English

L13 ANSWER 15 OF 27 CAPLUS COPYRIGHT 2002 ACS  
AN 1997:420528 CAPLUS  
DN 127:120304  
TI Expression of neuropeptides and nitric oxide synthase in neurons innervating the inflamed rat urinary bladder  
AU Callsen-Cencic, Peter; Mense, Siegfried  
CS Universitaet Heidelberg, Institut fuer Anatomie und Zellbiologie III, Im Neuenheimer Feld 307, D-69120, Heidelberg, Germany  
SO Journal of the Autonomic Nervous System (1997), 65(1), 33-44  
CODEN: JASYDS; ISSN: 0165-1838  
PB Elsevier  
DT Journal  
LA English

L13 ANSWER 16 OF 27 CAPLUS COPYRIGHT 2002 ACS  
AN 1997:351510 CAPLUS  
DN 127:79213  
TI Reflex pathways controlling urethral striated and smooth muscle function in the male rat  
AU Kakizaki, Hidehiro; Fraser, Matthew O.; De Groat, William C.  
CS Dep. Pharmacol., Univ. Pittsburgh Sch. Med., Pittsburgh, PA, 15261, USA  
SO American Journal of Physiology (1997), 272(5, Pt. 2), R1647-R1656  
CODEN: AJPHAP; ISSN: 0002-9513  
PB American Physiological Society  
DT Journal  
LA English

L13 ANSWER 17 OF 27 CAPLUS COPYRIGHT 2002 ACS  
AN 1997:297670 CAPLUS  
DN 127:16190  
TI Urinary bladder-urethral sphincter dysfunction in mice with targeted disruption of neuronal nitric oxide synthase models idiopathic voiding disorders in humans  
AU Burnett, Arthur L.; Calvin, David C.; Chamness, Shelly L.; Liu, Jian-Xiang; Nelson, Randy J.; Klein, Sabra L.; Dawson, Valina L.; Dawson, Ted M.; Snyder, Solomon H.  
CS Dep. Urol. Mol. Sci., Johns Hopkins Univ. Sch. Med., Baltimore, MD, 21205, USA  
SO Nature Medicine (New York) (1997), 3(5), 571-574  
CODEN: NAMEFI; ISSN: 1078-8956  
PB Nature Publishing Co.  
DT Journal  
LA English

L13 ANSWER 18 OF 27 CAPLUS COPYRIGHT 2002 ACS  
AN 1997:185707 CAPLUS  
DN 126:223275  
TI Distribution of NADPH-diaphorase and nitric oxide synthase-containing neurons in the intramural ganglia of guinea pig urinary bladder  
AU Zhou, Y.; Tan, C. K.; Ling, E. A.  
CS Dep. Anatomy, Fac. Med., National Univ. Singapore, 119260, Singapore  
SO Journal of Anatomy (1997), 190(1), 135-145  
CODEN: JOANAY; ISSN: 0021-8782  
PB Cambridge University Press  
DT Journal  
LA English

L13 ANSWER 19 OF 27 CAPLUS COPYRIGHT 2002 ACS  
AN 1997:185704 CAPLUS  
DN 126:210016

- TI Distribution of NADPH-diaphorase and nitric oxide synthase-containing neurons in the intramural ganglia of guinea pig urinary bladder  
AU Zhou, Y.; Tan, C. K.; Ling, E. A.  
CS Faculty Medicine, Natl. Univ. Singapore, Singapore, Singapore  
SO Journal of Anatomy (1997), 190(1), 135-145  
CODEN: JOANAY; ISSN: 0021-8782  
PB Cambridge University Press  
DT Journal  
LA English
- L13 ANSWER 20 OF 27 CAPLUS COPYRIGHT 2002 ACS  
AN 1997:146314 CAPLUS  
DN 126:210207  
TI Vesicourethral function in mice with genetic disruption of neuronal nitric oxide synthase  
AU Sutherland, Ronald S.; Kogan, Barry A.; Piechota, Hans J.; Gredt, David S.  
CS Dep. Urology, PHysiology, Univ. California Sch. Med., San Francisco, CA,  
USA  
SO Journal of Urology (Baltimore) (1997), 157(3), 1109-1116  
CODEN: JOURAA; ISSN: 0022-5347  
PB Williams & Wilkins  
DT Journal  
LA English
- L13 ANSWER 21 OF 27 CAPLUS COPYRIGHT 2002 ACS  
AN 1996:639839 CAPLUS  
DN 125:292613  
TI A pharmacological and histochemical study of hamster urethra and the role of urothelium  
AU Pinna, Christian; Ventura, Sabatino; Puglisi, Lina; Burnstock, Geoffrey  
CS Dept. of Anatomy and Developmental Biology, Univ. College London, London,  
WC1E 6BT, UK  
SO British Journal of Pharmacology (1996), 119(4), 655-662  
CODEN: BJPCBM; ISSN: 0007-1188  
PB Stockton  
DT Journal  
LA English
- L13 ANSWER 22 OF 27 CAPLUS COPYRIGHT 2002 ACS  
AN 1996:551707 CAPLUS  
DN 125:239097  
TI The effect of NG-monomethyl-L-arginine on bladder function  
AU Theobald, Robert J. Jr.  
CS Department of Pharmacology, Kirksville College of Osteopathic Medicine,  
800 West Jefferson Street, Kirksville, Kirksville, USA  
SO European Journal of Pharmacology (1996), 311(1), 73-78  
CODEN: EJPHAZ; ISSN: 0014-2999  
PB Elsevier  
DT Journal  
LA English
- L13 ANSWER 23 OF 27 CAPLUS COPYRIGHT 2002 ACS  
AN 1996:438470 CAPLUS  
DN 125:111196  
TI Role of spinal nitric oxide in the facilitation of the **micturition** reflex by bladder irritation  
AU Kakizaki, Hidehiro; De Groat, William C.  
CS School Medicine, University Pittsburgh, Pittsburgh, PA, 15261, USA  
SO Journal of Urology (Baltimore) (1996), 155(1), 355-360  
CODEN: JOURAA; ISSN: 0022-5347  
PB Williams & Wilkins  
DT Journal

LA English

L13 ANSWER 24 OF 27 CAPLUS COPYRIGHT 2002 ACS  
AN 1996:427961 CAPLUS  
DN 125:82655  
TI Characterization of nitric oxide synthase activity in sheep urinary tract:  
functional implications  
AU Garcia-Pascual, A.; Costa, G.; Labadia, A.; Persson, K.; Triguero, D.  
CS Faculty of Veterinary Sciences, Complutense University, Madrid, 28040,  
Spain  
SO British Journal of Pharmacology (1996), 118(4), 905-914  
CODEN: BJPCBM; ISSN: 0007-1188  
PB Stockton  
DT Journal  
LA English

L13 ANSWER 25 OF 27 CAPLUS COPYRIGHT 2002 ACS  
AN 1995:341899 CAPLUS  
DN 122:259288  
TI Nitric oxide synthase activity in the human urogenital tract  
AU Ehren, I.; Adolfsson, J.; Wiklund, N.P.  
CS Department of Urology, Karolinska Hospital, Stockholm, S-171-76, Swed.  
SO Urological Research (1994), 22(5), 287-90  
CODEN: URLRA5; ISSN: 0300-5623  
DT Journal  
LA English

L13 ANSWER 26 OF 27 CAPLUS COPYRIGHT 2002 ACS  
AN 1995:69559 CAPLUS  
DN 122:1508  
TI Ontogeny of nitric oxide synthase in the lumbosacral spinal cord of the  
neonatal rat  
AU Vizzard, Margaret A.; Erdman, Susan L.; Foerstermann, Ulrich; de Groat,  
William C.  
CS University of Pittsburgh, School of Medicine, Department of Pharmacology,  
13th floor, Biomedical Science Tower, Pittsburgh, PA, 15261, USA  
SO Developmental Brain Research (1994), 81(2), 201-17  
CODEN: DBRRDB; ISSN: 0165-3806  
DT Journal  
LA English

L13 ANSWER 27 OF 27 CAPLUS COPYRIGHT 2002 ACS  
AN 1992:568493 CAPLUS  
DN 117:168493  
TI Effects of inhibition of the L-arginine/nitric oxide pathway in the rat  
lower urinary tract in vivo and in vitro  
AU Persson, K.; Igawa, Y.; Mattiasson, A.; Andersson, K. E.  
CS Dep. Clin. Pharmacol., Lund Univ. Hosp., Lund, Swed.  
SO British Journal of Pharmacology (1992), 107(1), 178-84  
CODEN: BJPCBM; ISSN: 0007-1188  
DT Journal  
LA English

=> d 113 24 all

L13 ANSWER 24 OF 27 CAPLUS COPYRIGHT 2002 ACS  
AN 1996:427961 CAPLUS  
DN 125:82655  
TI Characterization of nitric oxide synthase activity in sheep urinary tract:  
functional implications  
AU Garcia-Pascual, A.; Costa, G.; Labadia, A.; Persson, K.; Triguero, D.

CS Faculty of Veterinary Sciences, Complutense University, Madrid, 28040, Spain  
SO British Journal of Pharmacology (1996), 118(4), 905-914  
CODEN: BJPCBM; ISSN: 0007-1188  
PB Stockton  
DT Journal  
LA English  
CC 13-1 (Mammalian Biochemistry)  
AB To define further the role of NO in urinary tract function, the authors measured the presence of nitric oxide synthase (NOS) activity, and its relation with functional NO-mediated responses to elec. field stimulation (EFS) in the urethra, the bladder detrusor muscle, and the ureter from sheep. NOS activity was assayed by the conversion of L-[14C]-arginine to L-[14C]-citrulline. Endogenous prodn. of citrulline was confirmed by TLC. NOS activity was detected in the cytosolic fraction from tissue homogenates with the following regional distribution (pmol citrulline/mg protein/min): urethra (33 .+- .3.3), detrusor (13.1 .+- .1.1) and ureter (1.5 .+- .0.2). No activity was detected in the particulate fraction of any region. NOS activity was dependent on Ca<sup>2+</sup>-calmodulin and required exogenously added NADPH and tetrahydrobiopterin (BH4) for maximal activity. Exclusion of calmodulin from the incubation mixt. did not modify NOS activity, but it was significantly reduced in the presence of the calmodulin antagonist, calmidazolium, suggesting the presence of enough endogenous calmodulin to sustain the obsd. NOS activity. NOS activity was inhibited to a greater extent by NG-nitro-L-arginine (L-NOARG) and its Me ester (L-NAME) than by NG-monomethyl-L-arginine (L-NMMA), whereas 7-nitroindazole (7-NI) was a weak inhibitor, and L-canavanine had no effect. Citrulline formation could be inhibited by superoxide dismutase in an oxyHb-sensitive manner, suggesting feedback inhibition of NOS by NO. EFS induced prominent NO-mediated relaxations in the urethra, whereas minor or no responses were obsd. in the detrusor and the ureter, resp. Urethral relaxations to EFS were inhibited by NOS inhibitors with the rank order of potency: L-NOARG = L-NAME > 7-NI > L-NMMA. Thus, the presence of NO-synthesizing enzyme activity in the sheep urinary tract was demonstrated which showed similar characteristics to the constitutive NOS isoform found in brain. It is suggested that the enzymic activity measured in the urethral muscle layer may account for the NO-mediated urethral relaxation during **micturition**, whereas regulation of detrusor and ureteral motor function by NOS-contg. nerves is less likely.  
ST nitric oxide synthase distribution urinary tract  
IT Ureter  
Urethra  
(distribution and characterization of nitric oxide synthase activity in sheep urinary tract and its functional implications)  
IT Bladder  
(detrusor muscle, distribution and characterization of nitric oxide synthase activity in sheep urinary tract and its functional implications)  
IT 125978-95-2, Nitric oxide synthase  
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)  
(distribution and characterization of nitric oxide synthase activity in sheep urinary tract and its functional implications)

=> d 113 23

L13 ANSWER 23 OF 27 CAPLUS COPYRIGHT 2002 ACS  
AN 1996:438470 CAPLUS

DN 125:111196

TI Role of spinal nitric oxide in the facilitation of the **micturition**

AU reflex by bladder irritation  
AU Kakizaki, Hidehiro; De Groat, William C.  
CS School Medicine, University Pittsburgh, Pittsburgh, PA, 15261, USA  
SO Journal of Urology (Baltimore) (1996), 155(1), 355-360  
CODEN: JOURAA; ISSN: 0022-5347  
PB Williams & Wilkins  
DT Journal  
LA English

=> d 113 all

L13 ANSWER 1 OF 27 CAPLUS COPYRIGHT 2002 ACS  
AN 2002:665046 CAPLUS  
DN 137:226422  
TI Increased urinary nitrite excretion in primary enuresis: effects of indomethacin treatment on urinary and serum osmolality and electrolytes, urinary volumes and nitrite excretion  
AU Al-Waili, N. S.  
CS Dubai Specialized Medical Center and Medical Research Laboratories, Islamic Establishment for Education, Dubai, United Arab Emirates  
SO BJU International (2002), 90(3), 294-301  
CODEN: BJINFO; ISSN: 1464-4096  
PB Blackwell Science Ltd.  
DT Journal  
LA English  
CC 1-8 (Pharmacology)  
AB Objectives: To assess urinary nitrite excretion, a stable end product of nitric oxide (NO), in patients with enuresis and in normal controls, and to evaluate the effects of indomethacin (a potent prostaglandin synthesis inhibitor) on urinary nitrite excretion, other urinary variables and bladder capacity. Patients and methods: The study comprised 10 patients with primary enuresis and 10 normal comparable controls (age range 6-14 yr). Nitrite was assayed in 'spot' morning urine samples in both the enuretics and normal controls. Enuretics were then given 50 mg indomethacin suppositories each night; urine vol., urinary osmolality and electrolytes, serum osmolality and electrolytes and urinary nitrite were assayed before indomethacin treatment and after 15 days of treatment. Results: The mean (SD) urinary nitrite excretion was 24.4 (19.6) .mu.mol/L in normal children and 275.9 (111.2) .mu.mol/L in enuretics ( $P < 0.05$ ). With indomethacin, the urinary nitrite concn. was significantly decreased to 141 (45.1) .mu.mol/L ( $P < 0.05$ ) and assocd. with a significant redn. in bed-wetting episodes and voiding frequency. The functional bladder capacity was < 70% of the predicted value for age in six of the patients: they had significant improvements on indomethacin, to values similar to those in patients with a nearly normal functional bladder capacity. Indomethacin decreased the 24-h urinary vol. by 41%, the night vol. by 40%, clearance of free water by 46% and increased the day:night urinary vol. ratio by 55%. The abs. amts. of urinary calcium, magnesium, phosphorus, urea, creatinine, and glucose were lower on indomethacin, although not statistically significantly so. Indomethacin decreased the 24-h urinary and 'spot' morning osmolality and osmotic clearance. There were no significant changes in serum osmolality and electrolyte concns. Indomethacin also decreased the abs. amt. of urinary sodium, chloride and potassium, fractional sodium and potassium excretion, and filtered sodium. Creatinine clearance was decreased by 20% ( $P > 0.05$ ) and normal 24-h urinary protein was significantly lower, by 47%, after indomethacin treatment ( $P < 0.05$ ). Conclusion: Urinary nitrite excretion increased significantly in patients with primary nocturnal enuresis; indomethacin markedly reduced bed-wetting episodes and decreased the frequency of voiding in enuretics with small or normal functional bladder capacity, which was assocd. with a significant decrease in urinary nitrite excretion. Indomethacin reduced

bed-wetting by decreasing the urine vol., clearance of free water and urinary electrolytes, and through possible effects on bladder and urethral contraction, by inhibiting NO and prostaglandin synthesis. NO and prostaglandins might be important in the pathogenesis of primary enuresis.

ST prostaglandin inhibitor indomethacin nitric oxide diuresis nocturnal enuresis

IT Development, mammalian postnatal  
(adolescent; indomethacin treatment effect on urinary and serum osmolality and electrolytes, urinary vols. and nitrite excretion in primary enuresis pediatric patients)

IT Development, mammalian postnatal  
(child; indomethacin treatment effect on urinary and serum osmolality and electrolytes, urinary vols. and nitrite excretion in primary enuresis pediatric patients)

IT **Micturition**  
(enuresis; indomethacin treatment effect on urinary and serum osmolality and electrolytes, urinary vols. and nitrite excretion in primary enuresis pediatric patients)

IT Blood serum  
Diuresis  
Electrolytes  
Human  
Osmolality  
Urine  
(indomethacin treatment effect on urinary and serum osmolality and electrolytes, urinary vols. and nitrite excretion in primary enuresis pediatric patients)

IT Proteins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(indomethacin treatment effect on urinary and serum osmolality and electrolytes, urinary vols. and nitrite excretion in primary enuresis pediatric patients)

IT Prostaglandins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(inhibitors; indomethacin treatment effect on urinary and serum osmolality and electrolytes, urinary vols. and nitrite excretion in primary enuresis pediatric patients)

IT 50-99-7, Glucose, biological studies 57-13-6, Urea, biological studies  
60-27-5, Creatinine 7439-95-4, Magnesium, biological studies  
7440-09-7, Potassium, biological studies 7440-23-5, Sodium, biological studies  
7440-70-2, Calcium, biological studies 7723-14-0, Phosphorus, biological studies  
**10102-43-9**, Nitric oxide, biological studies  
14797-65-0, Nitrite, biological studies 16887-00-6, Chloride, biological studies  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(indomethacin treatment effect on urinary and serum osmolality and electrolytes, urinary vols. and nitrite excretion in primary enuresis pediatric patients)

IT 53-86-1, Indomethacin  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(indomethacin treatment effect on urinary and serum osmolality and electrolytes, urinary vols. and nitrite excretion in primary enuresis pediatric patients)

RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD

- RE
- (1) Al-Waili, N; Clin Exp Pharmacol Physiol 1986, V13, P139 MEDLINE
  - (2) Al-Waili, N; Eur J Med Res 2000, V5, P40 CAPLUS
  - (3) Al-Waili, N; IRCS Med Sci 1986, V14, P322
  - (4) Al-Waili, N; J Pak Med As 1988, V38, P54 MEDLINE
  - (5) Al-Waili, N; J Urol 1989, V142, P1290 MEDLINE
  - (6) Andersson, E; J Urol 1992, V147, P253

- (7) Bachmann, S; Am J Kidney Dis 1994, V24, P122  
 (8) Batislam, E; Acta Urol Bel 1995, V63, P35 MEDLINE  
 (9) Bennett, B; J Urol 1995, V153, P2004 MEDLINE  
 (10) Eggert, P; Arch Dis Child 1995, V73, P508 MEDLINE  
 (11) Eggert, P; Pediatrics 1999, V103, P452 MEDLINE  
 (12) Fraser, O; J Urol 1995, V153, P461A  
 (13) Garcia, H; Am J Physiol 1996, V270, PF206  
 (14) Hamano, S; Eur Urol 2000, V37, P718 MEDLINE  
 (15) Herbert, L; Am J Physiol 1993, V265, PF643  
 (16) Hrabak, A; Life Sci 2001, V68, P1923 CAPLUS  
 (17) Hunsballe, J; J Urol 1997, V158, P830 CAPLUS  
 (18) Kawauchi, A; J Urol 2000, V163, P81 MEDLINE  
 (19) Kuzenetsova, A; Fiza ZI Me Soch 1996, V82, P78  
 (20) Line, I; Naunynsch Arch Pharmacol 1997, V356, P850  
 (21) Maggi, A; Pharmacol Res 1992, V25, P13  
 (22) Medel, R; Br J Urol 1998, V81, P46  
 (23) Mizutani, T; Sci Total Environ 1989, V80, P161 CAPLUS  
 (24) Motta, A; Prost Leuk Essential Fat Acid 1997, V56, P265 CAPLUS  
 (25) Natochin, V; Pediat Nephrol 2000, V14, P42  
 (26) Natochin, Y; Scand J Nephrol 1999, V33, P40  
 (27) Neveus, T; J Urol 2001, V165, P2022 MEDLINE  
 (28) Noonan, T; Proc Soc Exp Biol Med 1999, V221, P376  
 (29) Parlani, M; J Pharmacol Exp Ther 1993, V265, P713 CAPLUS  
 (30) Ray, C; Clin Sci 1985, V69, P293 CAPLUS  
 (31) Rushton, G; J Urol 1996, V156, P651  
 (32) Sener, F; Urology 1998, V52, P878 MEDLINE  
 (33) Seyberth, W; Monatsschr Kinderjeilkd 1987, V135, P178  
 (34) Suk Young, J; J Urol 1999, V162, P204  
 (35) Vizzard, A; Brain Res 1994, V646, P279  
 (36) Vurgun, N; Eur Urol 1997, V32, P85 MEDLINE  
 (37) Wall, L; Clin Obstet Gynecol 1990, V33, P367 MEDLINE

=> d 113 23 all

- L13 ANSWER 23 OF 27 CAPLUS COPYRIGHT 2002 ACS  
 AN 1996:438470 CAPLUS  
 DN 125:111196  
 TI Role of spinal nitric oxide in the facilitation of the **micturition** reflex by bladder irritation  
 AU Kakizaki, Hidehiro; De Groat, William C.  
 CS School Medicine, University Pittsburgh, Pittsburgh, PA, 15261, USA  
 SO Journal of Urology (Baltimore) (1996), 155(1), 355-360  
 CODEN: JOURAA; ISSN: 0022-5347  
 PB Williams & Wilkins  
 DT Journal  
 LA English  
 CC 13-6 (Mammalian Biochemistry)  
 Section cross-reference(s): 2  
 AB Nitric oxide (NO) is known to have an important transmitter function at peripheral synapses in the urogenital tract and has also been implicated in the transmission of nociceptive information in the spinal cord. The present study evaluated the role of NO in the central **micturition** reflex pathway. We examd. the effect of N-nitro-L-arginine Me ester (L-NAME), an inhibitor of NO synthase, on **micturition** reflexes induced by continuous infusion of saline or 0.1% acetic acid (a noxious stimulus) into the bladder in urethane-anesthetized female rats. Bladder and external urethral sphincter function were monitored with a continuous cystometrogram (CMG) and electromyog. (EMG). Intrathecal injection of L-NAME (0.01 to 1 .mu.mol.) did not significantly change the CMG or sphincter EMG during saline infusion. Infusion of acetic acid decreased the intercontraction interval (ICI), indicating a decrease in the vol.

threshold for inducing **micturition**. Subsequent intrathecal administration of L-NAME partially reversed the decreased ICI in a dose-dependent manner, but did not change the amplitude of bladder contractions: 0.01, 0.1 and 1 .mu.mol. of L-NAME produced increases of 25%, 31% and 56% in the ICI. D-NAME, the inactive stereoisomer had no effect. This effect of L-NAME was reversed by injection of L-arginine (2 .mu.mol. intrathecally) which, by itself, did not alter ICI during saline infusion or acetic acid infusion. These results indicate that: (1) spinal NO contg. pathways do not play a role in the normal **micturition** reflex, (2) NO is involved at the spinal level in the facilitation of the **micturition** reflex by nociceptive bladder afferents activated by noxious chem. irritation of the bladder.

ST nitric oxide spinal **micturition** reflex bladder

IT Bladder

Pain

Spinal cord

Urethra

(spinal nitric oxide in facilitation of **micturition** reflex by bladder irritation)

IT Reflex

(**micturition**, spinal nitric oxide in facilitation of **micturition** reflex by bladder irritation)

IT 10102-43-9, Nitrogen oxide (NO), biological studies

125978-95-2, Synthetase, nitric oxide

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(spinal nitric oxide in facilitation of **micturition** reflex by bladder irritation)

=> d 113 22

L13 ANSWER 22 OF 27 CAPLUS COPYRIGHT 2002 ACS

AN 1996:551707 CAPLUS

DN 125:239097

TI The effect of NG-monomethyl-L-arginine on bladder function

AU Theobald, Robert J. Jr.

CS Department of Pharmacology, Kirksville College of Osteopathic Medicine, 800 West Jefferson Street, Kirksville, Kirksville, USA

SO European Journal of Pharmacology (1996), 311(1), 73-78

CODEN: EJPHAZ; ISSN: 0014-2999

PB Elsevier

DT Journal

LA English

=> d 113 22 all

L13 ANSWER 22 OF 27 CAPLUS COPYRIGHT 2002 ACS

AN 1996:551707 CAPLUS

DN 125:239097

TI The effect of NG-monomethyl-L-arginine on bladder function

AU Theobald, Robert J. Jr.

CS Department of Pharmacology, Kirksville College of Osteopathic Medicine, 800 West Jefferson Street, Kirksville, Kirksville, USA

SO European Journal of Pharmacology (1996), 311(1), 73-78

CODEN: EJPHAZ; ISSN: 0014-2999

PB Elsevier

DT Journal

LA English

CC 2-8 (Mammalian Hormones)

Section cross-reference(s): 13

AB Recent studies have demonstrated the presence of nitric oxide synthase (NO synthase) in lower urinary tract tissues, however, its role in the detrusor is unclear. The current study was designed to det. if NO synthase inhibition alters detrusor activities, including **micturition** vol. threshold, and inhibition of pelvic nerve-evoked contractions by various stimuli. In naive, anesthetized adult cats, inhibition of pelvic nerve-evoked bladder contractions, induced by hypogastric nerve stimulation or the intraarterial administration of NA, ATP, adenosine, .beta.,.gamma.-methylene ATP and 2-methylthio ATP, was measured before and after inhibition of NO synthase. The **micturition** vol. threshold was also measured before and after NO synthase inhibition. L-NMMA decreased the **micturition** vol. threshold by 38% (2 mg intravesical administration) or 80% (4 mg/kg i.a.). The magnitude of the **micturition** contractions was modestly increased. These results, and information in the literature, indicate that NO may play a role in the collection phase of the bladder cycle and any alteration of nitric oxide availability could induce or allow development of various bladder malfunctions, such as small bladder diseases, like interstitial cystitis.

ST nitric oxide synthase bladder function

IT Bladder  
(nitric oxide synthase role in bladder function)

IT 10102-43-9, Nitric oxide, biological studies 125978-95-2  
, Nitric oxide synthase  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(nitric oxide synthase role in bladder function)

=> d 113 21 all

L13 ANSWER 21 OF 27 CAPLUS COPYRIGHT 2002 ACS  
AN 1996:639839 CAPLUS  
DN 125:292613  
TI A pharmacological and histochemical study of hamster urethra and the role of urothelium  
AU Pinna, Christian; Ventura, Sabatino; Puglisi, Lina; Burnstock, Geoffrey  
CS Dept. of Anatomy and Developmental Biology, Univ. College London, London, WC1E 6BT, UK  
SO British Journal of Pharmacology (1996), 119(4), 655-662  
CODEN: BJPCBM; ISSN: 0007-1188  
PB Stockton  
DT Journal  
LA English  
CC 1-8 (Pharmacology)  
Section cross-reference(s): 13  
AB 1 Elec. field stimulation (EFS) of circular strips of hamster proximal urethra caused frequency-dependent relaxations at raised tone. Phentolamine (10<sup>-6</sup> M), propranolol (10<sup>-6</sup>M) and atropine (10<sup>-6</sup> M) were present throughout the expt. Neurogenic relaxation was attenuated by L-NG-nitroarginine Me ester (L-NAME) (10<sup>-4</sup>M), was restored by L-arginine (3 x 10<sup>-3</sup>M) but not by D-arginine (3 x 10<sup>-3</sup>M) and completely blocked by tetrodotoxin (10<sup>-6</sup>M). Neurogenic relaxation was also reduced by suramin (10<sup>-4</sup>M) and totally blocked by suramin together with L-NAME. Strips of hamster urethra devoid of urothelium showed little, if any, relaxant response to EFS. 2 An immunohistochem. study showed nitric oxide synthase-immunoreactive nerves in the smooth muscle layers and in the lamina propria, just beneath the urothelium, but not nitric oxide synthase (NOS) staining in the urothelial layer. 3 Noradrenaline elicited a significantly greater contraction in strips without urothelium than in control strips. L-NAME (10<sup>-4</sup>M) did not affect noradrenaline-induced contraction in both control and urothelium-free strips. The contractile response to acetylcholine was not dependent on the presence or absence of

urothelium. Nevertheless the response induced by exogenous acetylcholine (10-3M) was increased by L-NAME (10-4M), both in intact and in urothelium-free strips. 4 Prostaglandin E2 (10-8-5 x 10-6 M) and 2-methyl-thio-ATP (10-9-10-5 M) relaxed proximal urethra. Suramin (10-4M) significantly inhibited the relaxation induced by 2-methyl-thio-ATP. The amplitude of these responses was not significantly different between intact and urothelium-free strips and was not blocked by L-NAME (10-4M). 5 These results suggest that nitric oxide (NO) is the principal transmitter involved in the non-adrenergic, non-cholinergic (NANC) relaxation of hamster proximal urethra possibly together with another inhibitory transmitter released from nerves. NO can be released from nerves located in the circular smooth muscle layer and in the lamina propria rather than in the urothelium. The reduced neurogenic relaxation in urothelium-free preps. suggests that a NO-dependent inhibitory factor is released from the urothelium. In addn., ATP and prostaglandin E2 may be involved, together with NO, in the urethra during **micturition**.

ST drug urethra **micturition** urothelium ATP PGE2; nitric oxide  
urethra urothelium ATP PGE2  
IT Urethra  
(a pharmacol. and histochem. study of hamster urethra and the role of urothelium)  
IT Neurohormones  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(neurotransmitters, a pharmacol. and histochem. study of hamster urethra and the role of urothelium)  
IT 50-60-2, Phentolamine 51-41-2, Noradrenaline 51-84-3, Acetylcholine, biological studies 56-65-5, ATP, biological studies 74-79-3, L-Arginine, biological studies 145-63-1, Suramin 157-06-2, D-Arginine 363-24-6, Prostaglandin E2 4368-28-9, Tetrodotoxin 10102-43-9, Nitric oxide, biological studies 50903-99-6, L-NAME 125978-95-2, Nitric oxide synthase  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(a pharmacol. and histochem. study of hamster urethra and the role of urothelium)

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(FILE 'HOME' ENTERED AT 12:43:00 ON 17 OCT 2002)

FILE 'REGISTRY' ENTERED AT 12:44:28 ON 17 OCT 2002

L1 51 S INDOMETHACIN  
L2 75 S NAPROXEN  
L3 6 S NIMESULIDE  
L4 13 S NITROGLYCERIN  
L5 443 S NITRIC OXIDE

FILE 'CAPLUS' ENTERED AT 12:48:44 ON 17 OCT 2002

E MICTURITION  
L6 861 S E3-E6  
E BLADDER  
L7 24458 S E3  
E INCONTINENCE  
L8 2013 S E3-E7  
E URINARY  
L9 107957 S E3  
L10 6048 S L4  
L11 76683 S L5  
L12 1 S L6 AND L10

L13 27 S L6 AND L11

=> e detrusor

E1 1 DETRUSION/BI  
E2 2 DETRUSITOL/BI  
E3 963 --> DETRUSOR/BI  
E4 1 DETRUSORECTOMY/BI  
E5 16 DETRUSORS/BI  
E6 4 DETRUSSOR/BI  
E7 1 DETRYDROGENASE/BI  
E8 1 DETRYMENTAL/BI  
E9 1 DETRYPSINIZED/BI  
E10 2 DETRTYLATION/BI  
E11 31469 DETS/BI  
E12 2 DETS4/BI

=> s e3-e6

963 DETRUSOR/BI  
1 DETRUSORECTOMY/BI  
16 DETRUSORS/BI  
4 DETRUSSOR/BI  
L14 966 (DETRUSOR/BI OR DETRUSORECTOMY/BI OR DETRUSORS/BI OR DETRUSSOR/B  
I)

=> s l14 and l10

L15 1 L14 AND L10

=> d l15 all

L15 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS  
AN 2001:467132 CAPLUS  
DN 136:116664  
TI Augmentation of nitric oxide to treat **detrusor-external**  
sphincter dyssynergia in spinal cord injury  
AU Mamas, M. A.; Reynard, J. M.; Brading, A. F.  
CS Nuffield Department of Medicine, John Radcliffe Hospital, Oxford, UK  
SO Lancet (2001), 357(9272), 1964-1967  
CODEN: LANCAO; ISSN: 0140-6736  
PB Lancet Ltd.  
DT Journal  
LA English  
CC 14-10 (Mammalian Pathological Biochemistry)  
Section cross-reference(s): 1  
AB **Detrusor-external sphincter dyssynergia (DSD)** is a common cause  
of bladder outlet obstruction in men with spinal cord injuries, which if  
left untreated leads ultimately to renal failure. External sphincterotomy  
is currently the main treatment for DSD. However, obstruction persists in  
a substantial proportion of cases after this procedure. There is no  
effective drug treatment for DSD. Nitric oxide is an inhibitory  
neurotransmitter synthesized by nitric oxide synthase. Both animal and  
human studies suggest that nitric oxide mediates urethral sphincter  
relaxation. Nitric-oxide-synthase staining neurons have been identified  
in very high d. in the urethral sphincters of a variety of animals and in  
human beings. Relaxation of the urethral sphincter is abolished by  
inhibitors of nitric oxide synthase and enhanced by nitric oxide donors.  
Mice with targeted deletion of the gene, for neuronal nitric oxide have  
urethral sphincters that do not relax in response to elec. stimulation.  
We hypothesize that augmentation of external sphincter nitric oxide could  
be an effective pharmacol. treatment for DSD. Currently available nitric  
oxide donors such as glyceryl trinitrate or isosorbide mononitrate could  
be used to deliver nitric oxide to the urethral sphincter. The variable  
pharmacokinetics of these drugs combined with different modes of delivery

(sublingual, buccal, or oral) could be used to achieve both short-term and long-term increases in concns. of sphincter nitric oxide, thereby resulting in either acute or chronic lowering of urethral pressure. The safety and efficacy of this potential treatment for DSD needs to be established in clin. trials of men with spinal cord injures with DSD.

ST NO bladder outlet obstruction spinal cord injury

IT Spinal cord  
(injury; augmentation of nitric oxide to treat **detrusor**-external sphincter dyssynergia in spinal cord injury)

IT Bladder  
(obstruction; augmentation of nitric oxide to treat **detrusor**-external sphincter dyssynergia in spinal cord injury)

IT 10102-43-9, Nitric oxide, biological studies  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(augmentation of nitric oxide to treat **detrusor**-external sphincter dyssynergia in spinal cord injury)

IT 55-63-0, Glyceryl trinitrate 16051-77-7, Isosorbide mononitrate  
RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(augmentation of nitric oxide to treat **detrusor**-external sphincter dyssynergia in spinal cord injury)

RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD

- RE
- (1) Bennett, B; J Urol 1995, V153, P2004 MEDLINE
  - (2) Burnett, A; Nat Med 1997, V3, P571 CAPLUS
  - (3) Catz, A; Spinal Cord 1997, V35, P48 MEDLINE
  - (4) Dykstra, D; J Urol 1987, V138, P1155 MEDLINE
  - (5) Ehren, I; Urology 1994, V44, P683 MEDLINE
  - (6) Fontaine, E; J Urol 1996, V155, P277 MEDLINE
  - (7) Fraser, M; J Urol 1998, V159, P23
  - (8) Gibbon, N; Int J Paraplegia 1965, V2, P264
  - (9) Ho, K; J Urol 1999, V161, P40
  - (10) Kim, Y; J Urol 1998, V159, P493 MEDLINE
  - (11) Perkash, I; J Spinal Cord Med 1995, V18, P236 MEDLINE
  - (12) Persson, K; Eur J Pharmacol 1994, V268, P159 CAPLUS
  - (13) Ross, J; J Urol 1958, V79, P742 MEDLINE
  - (14) Smet, P; Neuroscience 1996, V71, P337 CAPLUS
  - (15) Sutherland, R; J Urol 1997, V157, P1109 CAPLUS
  - (16) Thyberg, M; Paraplegia 1994, V32, P308 MEDLINE
  - (17) Webb, D; Am J Cardiol 1999, V83, P21C CAPLUS
  - (18) Wei, J; Am J Cardiol 1981, V48, P778 CAPLUS
  - (19) Wein, A; J Urol 1998, V160, P961 MEDLINE
  - (20) Werkstrom, V; Br J Pharmacol 1995, V116, P1599 MEDLINE

=> s l14 and l11

L16 38 L14 AND L11

=> d his

(FILE 'HOME' ENTERED AT 12:43:00 ON 17 OCT 2002)

FILE 'REGISTRY' ENTERED AT 12:44:28 ON 17 OCT 2002

L1 51 S INDOMETHACIN  
L2 75 S NAPROXEN  
L3 6 S NIMESULIDE  
L4 13 S NITROGLYCERIN  
L5 443 S NITRIC OXIDE

FILE 'CAPLUS' ENTERED AT 12:48:44 ON 17 OCT 2002

E MICTURITION  
L6 861 S E3-E6

E BLADDER  
L7 24458 S E3  
E INCONTINENCE  
L8 2013 S E3-E7  
E URINARY  
L9 107957 S E3  
L10 6048 S L4  
L11 76683 S L5  
L12 1 S L6 AND L10  
L13 27 S L6 AND L11  
E DETRUSOR  
L14 966 S E3-E6  
L15 1 S L14 AND L10  
L16 38 S L14 AND L11

=> s l16 not l13  
L17 31 L16 NOT L13

=> d 117 10-31

L17 ANSWER 10 OF 31 CAPLUS COPYRIGHT 2002 ACS  
AN 2000:92936 CAPLUS  
DN 132:249535  
TI Up-regulation of endothelin (ETA and ETB) receptors and down-regulation of nitric oxide synthase in the **detrusor** of a rabbit model of partial bladder outlet obstruction  
AU Khan, M. A.; Dashwood, M. R.; Thompson, C. S.; Mumtaz, F. H.; Mkhailidis, D. P.; Morgan, R. J.  
CS Department of Urology, Royal Free Hospital, London, NW3 2QG, UK  
SO Urological Research (1999), 27(6), 445-453  
CODEN: URLRA5; ISSN: 0300-5623  
PB Springer-Verlag  
DT Journal  
LA English  
RE.CNT 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 11 OF 31 CAPLUS COPYRIGHT 2002 ACS  
AN 1999:722933 CAPLUS  
DN 131:332126  
TI Muscle-derived cell mediated gene delivery for treating muscle- and bone-related injury or dysfunction  
IN Chancellor, Michael B.; Huard, Johnny  
PA University of Pittsburgh, USA  
SO PCT Int. Appl., 140 pp.  
CODEN: PIIXD2  
DT Patent  
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9956785	A2	19991111	WO 1999-US9451	19990430
	WO 9956785	A3	20010419		
	W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			

CA 2330660 AA 19991111 CA 1999-2330660 19990430  
AU 9937757 A1 19991123 AU 1999-37757 19990430  
EP 1113807 A2 20010711 EP 1999-920202 19990430  
R: AT, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI  
PRAI US 1998-83917P P 19980501  
WO 1999-US9451 W 19990430

L17 ANSWER 12 OF 31 CAPLUS COPYRIGHT 2002 ACS  
AN 1999:496321 CAPLUS  
DN 131:298249  
TI Alterations in the nitric oxide synthase binding sites and non-adrenergic, non-cholinergic mediated smooth muscle relaxation in the diabetic rabbit bladder outlet: possible relevance to the pathogenesis of diabetic cystopathy  
AU Mumtaz, F. H.; Sullivan, M. E.; Thompson, C. S.; Dashwood, M. R.; Naseem, K. M.; Bruckdorfer, K. R.; Mikhailidis, D. P.; Morgan, R. J.  
CS Departments of Urology, Chemical Pathology and Human Metabolism, Physiology and Biochemistry, London, N3 1PA, UK  
SO Journal of Urology (Baltimore) (1999), 162(2), 558-566  
CODEN: JOURAA; ISSN: 0022-5347  
PB Lippincott Williams & Wilkins  
DT Journal  
LA English  
RE.CNT 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 13 OF 31 CAPLUS COPYRIGHT 2002 ACS  
AN 1998:757713 CAPLUS  
DN 130:178468  
TI Involvement of nitric oxide in the potentiation of neurogenic contraction by manganese and nickel ions in mouse urinary bladder  
AU Liu, S.-H.; Lin-Shiau, S.-Y.  
CS No. 1, College of Medicine, Institute of Toxicology, National Taiwan University, Jen-Ai Road, 1st section, Taipei, 10018, Taiwan  
SO Naunyn-Schmiedeberg's Archives of Pharmacology (1998), 358(6), 678-681  
CODEN: NSAPCC; ISSN: 0028-1298  
PB Springer-Verlag  
DT Journal  
LA English  
RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 14 OF 31 CAPLUS COPYRIGHT 2002 ACS  
AN 1998:708570 CAPLUS  
DN 130:192162  
TI Inhibitory innervation of the guinea-pig urethra; roles of CO, NO and VIP  
AU Werkstrom, Viktoria; Alm, Per; Persson, Katarina; Andersson, Karl-Erik  
CS Department of Clinical Pharmacology, Lund University Hospital, Lund, S-221 85, Swed.  
SO Journal of the Autonomic Nervous System (1998), 74(1), 33-42  
CODEN: JASYDS; ISSN: 0165-1838  
PB Elsevier Science B.V.  
DT Journal  
LA English  
RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 15 OF 31 CAPLUS COPYRIGHT 2002 ACS  
AN 1998:124536 CAPLUS  
DN 128:239751  
TI Nitrergic and cholinergic innervation of the rat lower urinary tract after pelvic ganglionectomy

AU Persson, Katarina; Alm, Per; Uvelius, Bengt; Andersson, Karl-Erik  
CS Dep. Clinical Pharmacol., Lund Univ. Hosp., Lund, S-221 85, Swed.  
SO American Journal of Physiology (1998), 274(2, Pt. 2), R389-R397  
CODEN: AJPHAP; ISSN: 0002-9513  
PB American Physiological Society  
DT Journal  
LA English

L17 ANSWER 16 OF 31 CAPLUS COPYRIGHT 2002 ACS  
AN 1997:753981 CAPLUS  
DN 128:113371  
TI Enhancement by nitric oxide of neurogenic contraction in the mouse urinary bladder  
AU Liu, S.-H.; Lin-Shiau, Shoei-Yn  
CS No. 1, College of Medicine, Institute of Toxicology, National Taiwan University, Jen-Ai Road, 1st section, Taipei, 10018, Taiwan  
SO Naunyn-Schmiedeberg's Archives of Pharmacology (1997), 356(6), 850-852  
CODEN: NSAPCC; ISSN: 0028-1298  
PB Springer-Verlag  
DT Journal  
LA English

L17 ANSWER 17 OF 31 CAPLUS COPYRIGHT 2002 ACS  
AN 1996:447425 CAPLUS  
DN 125:105692  
TI Effects of nitric oxide on **detrusor** relaxation  
AU Chung, Byung Ha; Choi, Seung Kang; Chang, Ki Churl  
CS College Medicine, Yonsei University, Seoul, S. Korea  
SO Journal of Urology (Baltimore) (1996), 155(6), 2090-2093  
CODEN: JOURAA; ISSN: 0022-5347  
PB Williams & Wilkins  
DT Journal  
LA English

L17 ANSWER 18 OF 31 CAPLUS COPYRIGHT 2002 ACS  
AN 1996:145475 CAPLUS  
DN 124:221272  
TI Distribution of nitric oxide synthase-immunoreactive nerves and identification of the cellular targets of nitric oxide in guinea pig and human urinary bladder by cGMP immunohistochemistry  
AU Smet, P. J.; Jonavicius, J.; Marshall, V. R.; De Vente, J.  
CS Centre for Neuroscience, Flinders Univ. of South Australia, Adelaide, 6200 MD, Australia  
SO Neuroscience (Oxford) (1996), 71(2), 337-48  
CODEN: NRSCDN; ISSN: 0306-4522  
PB Elsevier  
DT Journal  
LA English

L17 ANSWER 19 OF 31 CAPLUS COPYRIGHT 2002 ACS  
AN 1996:100443 CAPLUS  
DN 124:194705  
TI Nitric oxide synthase-immunoreactive, adrenergic, cholinergic, and peptidergic nerves of the female rat urinary tract: a comparative study  
AU Alm, P.; Zygmunt, P.K.E.; Iselin, C.; Larsson, B.; Uvelius, B.; Werner, S.; Andersson, K.-E.  
CS Department of Pathology, Lund University Hospital, Lund, S-221 85, Swed.  
SO Journal of the Autonomic Nervous System (1995), 56(1+2), 105-14  
CODEN: JASYDS; ISSN: 0165-1838  
PB Elsevier  
DT Journal  
LA English

L17 ANSWER 20 OF 31 CAPLUS COPYRIGHT 2002 ACS  
AN 1995:706430 CAPLUS  
DN 123:247354  
TI The L-arginine:nitric oxide pathway in pig lower urinary tract: Nitric oxide synthase immunohistochemistry, NADPH diaphorase activity and functional effects  
AU Persson, K.; Alm, P.; Johansson, K.; Larsson, B.; Andersson, K. -E.  
CS Departments Clinical Pharmacology, Lund University, Lund, Swed.  
SO Portland Press Proceedings (1994), 8(Biology of Nitric Oxide, 3), 413-17  
CODEN: POPPEF; ISSN: 0966-4068  
PB Portland Press  
DT Journal  
LA English

L17 ANSWER 21 OF 31 CAPLUS COPYRIGHT 2002 ACS  
AN 1995:574453 CAPLUS  
DN 123:133475  
TI Co-existence of nitrergic, peptidergic and acetylcholine esterase-positive nerves in the pig lower urinary tract  
AU Persson, Katarina; Alm, Per; Johansson, Kjell; Larsson, Bengt; Andersson, Karl-Erik  
CS Department of Clinical Pharmacology, University of Lund, Lund, S-221 85, Swed.  
SO Journal of the Autonomic Nervous System (1995), 52(2+3), 225-36  
CODEN: JASYDS; ISSN: 0165-1838  
DT Journal  
LA English

L17 ANSWER 22 OF 31 CAPLUS COPYRIGHT 2002 ACS  
AN 1995:341865 CAPLUS  
DN 122:123675  
TI NADPH diaphorase and nitric oxide synthase are expressed by the majority of intramural neurons in the neonatal guinea pig urinary bladder  
AU Saffrey, M. J.; Hassall, C. J. S.; Moules, E. W.; Burnstock, G.  
CS Department of Anatomy and Development Biology, University College, London, UK  
SO Journal of Anatomy (1994), 185(3), 487-95  
CODEN: JOANAY; ISSN: 0021-8782  
DT Journal  
LA English

L17 ANSWER 23 OF 31 CAPLUS COPYRIGHT 2002 ACS  
AN 1995:303909 CAPLUS  
DN 122:72511  
TI Evidence for the presence of both pre- and postjunctional P2-purinoceptor subtypes in human isolated urinary bladder  
AU Palea, S.; Pietra, C.; Trist, D. G.; Artibani, W.; Calpista, A.; Corsi, M.  
CS Dep. Pharmacol., Glaxo Res. Lab., Verona, 37135, Italy  
SO British Journal of Pharmacology (1995), 114(1), 35-40  
CODEN: BJPCBM; ISSN: 0007-1188  
PB Stockton  
DT Journal  
LA English

L17 ANSWER 24 OF 31 CAPLUS COPYRIGHT 2002 ACS  
AN 1994:500447 CAPLUS  
DN 121:100447  
TI Non-adrenergic, non-cholinergic relaxation and levels of cyclic nucleotides in rabbit lower urinary tract  
AU Persson, Katarina; Andersson, Karl-Erik  
CS Department of Clinical Pharmacology, Lund University Hospital, Lund, S-221

85, Swed.

SO European Journal of Pharmacology, Molecular Pharmacology Section (1994),  
268(2), 159-68  
CODEN: EJPPET; ISSN: 0922-4106

DT Journal  
LA English

L17 ANSWER 25 OF 31 CAPLUS COPYRIGHT 2002 ACS  
AN 1994:319894 CAPLUS  
DN 120:319894  
TI Distribution of NADPH-diaphorase-positive nerves supplying the human urinary bladder  
AU Smet, Peter J.; Edyvane, Katherine A.; Jonavicius, Jarmila; Marshall, Villis R.  
CS Div. Surg., Repatriation Gen. Hosp., Adelaide, 5041, Australia  
SO Journal of the Autonomic Nervous System (1994), 47(1-2), 109-13  
CODEN: JASYDS; ISSN: 0165-1838  
DT Journal  
LA English

L17 ANSWER 26 OF 31 CAPLUS COPYRIGHT 2002 ACS  
AN 1994:28213 CAPLUS  
DN 120:28213  
TI NADPH-diaphorase and NANC relaxations are correlated in the sheep urinary tract  
AU Triguero, Domingo; Prieto, Dolores; Garcia-Pascual, Angeles  
CS Vet. Sch., Complutense Univ., Madrid, 28040, Spain  
SO Neuroscience Letters (1993), 163(1), 93-6  
CODEN: NELED5; ISSN: 0304-3940  
DT Journal  
LA English

L17 ANSWER 27 OF 31 CAPLUS COPYRIGHT 2002 ACS  
AN 1993:667246 CAPLUS  
DN 119:267246  
TI Nitric oxide synthase in pig lower urinary tract: Immunohistochemistry, NADPH diaphorase histochemistry and functional effects  
AU Persson, Katarina; Alm, Per; Johansson, Kjell; Larsson, Bengt; Andersson, Karl Erik  
CS Dep. Clin. Pharmacol., Lund Univ., Lund, Swed.  
SO British Journal of Pharmacology (1993), 110(2), 521-30  
CODEN: BJPCBM; ISSN: 0007-1188  
DT Journal  
LA English

L17 ANSWER 28 OF 31 CAPLUS COPYRIGHT 2002 ACS  
AN 1993:486878 CAPLUS  
DN 119:86878  
TI Nitric oxide and nonadrenergic, noncholinergic nerve-mediated relaxation of isolated pig and rabbit urethral and pig trigonal smooth muscle  
AU Persson, K.; Garcia-Pascual, A.; Forman, A.; Toetstrup, A.; Andersson, K. E.  
CS Dep. Clin. Pharmacol., Lund Univ. Hosp., Lund, Swed.  
SO Biol. Nitric Oxide, Proc. Int. Meet., 2nd (1992), Meeting Date 1991,  
Volume 1, 312-16. Editor(s): Moncada, Salvador. Publisher: Portland Press, London, UK.  
CODEN: 59AFA7  
DT Conference  
LA English

L17 ANSWER 29 OF 31 CAPLUS COPYRIGHT 2002 ACS  
AN 1993:252196 CAPLUS

DN 118:252196  
TI Partial mediation by nitric oxide of the relaxation of human isolated  
**detrusor** strips in response to electrical field stimulation  
AU James, M. J.; Birmingham, A. T.; Hill, S. J.  
CS Med. Sch., Univ. Nottingham, Nottingham, NG7 2UH, UK  
SO British Journal of Clinical Pharmacology (1993), 35(4), 366-72  
CODEN: BCPHBM; ISSN: 0306-5251  
DT Journal  
LA English

L17 ANSWER 30 OF 31 CAPLUS COPYRIGHT 2002 ACS  
AN 1992:445429 CAPLUS  
DN 117:45429  
TI Nitric oxide and relaxation of pig lower urinary tract  
AU Persson, Katarina; Andersson, Karl Erik  
CS Dep. Clin. Pharmacol., Lund Univ. Hosp., Lund, 221 85, Swed.  
SO British Journal of Pharmacology (1992), 106(2), 416-22  
CODEN: BJPCBM; ISSN: 0007-1188  
DT Journal  
LA English

L17 ANSWER 31 OF 31 CAPLUS COPYRIGHT 2002 ACS  
AN 1992:77163 CAPLUS  
DN 116:77163  
TI Inhibition of the arginine/nitric oxide pathway causes bladder  
hyperactivity in the rat  
AU Persson, K.; Igawa, Y.; Mattiasson, A.; Andersson, K. E.  
CS Dep. Clin. Pharmacol., Lund Univ. Hosp., Lund, 221 85, Swed.  
SO Acta Physiologica Scandinavica (1992), 144(1), 107-8  
CODEN: APSCAX; ISSN: 0001-6772  
DT Journal  
LA English

=> d 117 31 all

L17 ANSWER 31 OF 31 CAPLUS COPYRIGHT 2002 ACS  
AN 1992:77163 CAPLUS  
DN 116:77163  
TI Inhibition of the arginine/nitric oxide pathway causes bladder  
hyperactivity in the rat  
AU Persson, K.; Igawa, Y.; Mattiasson, A.; Andersson, K. E.  
CS Dep. Clin. Pharmacol., Lund Univ. Hosp., Lund, 221 85, Swed.  
SO Acta Physiologica Scandinavica (1992), 144(1), 107-8  
CODEN: APSCAX; ISSN: 0001-6772  
DT Journal  
LA English  
CC 2-10 (Mammalian Hormones)  
Section cross-reference(s): 14  
AB The present expts. demonstrate that inhibition of the L-arginine/nitric  
oxide pathway leads to bladder hyperactivity and decreased bladder  
capacity. This suggests that continuous activity in this pathway is one  
of the factors keeping the bladder relaxed during filling. The  
NANC-mediated relaxant response to elec. stimulation found previously in  
vitro in the trigone and the urethra of several species, but not in the  
**detrusor** muscle, may reflect the localization of such activity,  
and lends support to the view that bladder hyperactivity (unstable  
**detrusor** contractions) may be initiated from the bladder outlet  
region.  
ST bladder hyperactivity arginine nitric oxide control  
IT Bladder  
(disease, hyperactivity, arginine/nitric oxide pathway in pathophysiol.

of)

IT 10102-43-9, Nitric oxide, biological studies  
RL: BIOL (Biological study)  
(arginine pathway, in control of bladder hyperactivity, pathophysiol.  
in relation to)

IT 74-79-3, L-Arginine, biological studies  
RL: BIOL (Biological study)  
(nitric oxide pathway, in control of bladder hyperactivity,  
pathophysiol. in relation to)

=> d 117 30 all

L17 ANSWER 30 OF 31 CAPLUS COPYRIGHT 2002 ACS  
AN 1992:445429 CAPLUS  
DN 117:45429  
TI Nitric oxide and relaxation of pig lower urinary tract  
AU Persson, Katarina; Andersson, Karl Erik  
CS Dep. Clin. Pharmacol., Lund Univ. Hosp., Lund, 221 85, Swed.  
SO British Journal of Pharmacology (1992), 106(2), 416-22  
CODEN: BJPCBM; ISSN: 0007-1188  
DT Journal  
LA English  
CC 13-6 (Mammalian Biochemistry)  
AB The authors studied the non-adrenergic, non-cholinergic (NANC) nerve-mediated relaxation induced by elec. stimulation in pig isolated lower urinary tract smooth muscle, and the possible involvement of the L-arginine (L-ARG)/nitric oxide (NO) pathway in this response. Trigonal strips, precontracted by noradrenaline (NA), carbachol, or endothelin-1 (ET-1), relaxed frequency-dependently in response to elec. stimulation. Max. relaxation was obtained at 6-8 Hz, and amounted to 56, 77, and 62% of the agonist-induced tension in preps. contracted by NA, carbachol, or ET-1, resp. Exposure to NG-nitro-L-arginine (L-NOARG; 10<sup>-7</sup>-10<sup>-5</sup> M) concn.-dependently reduced the relaxant response in preps. contracted by NA. L-NOARG (10<sup>-6</sup> M) reduced the maximal response to 51% of control. L-NOARG (10<sup>-5</sup> M) abolished all relaxation, and unmasked a contractile component; D-NOARG had no effect. Also in trigonal preps., where the tension had been raised by carbachol or ET-1, L-NOARG (10<sup>-5</sup> M) markedly reduced relaxations evoked by elec. stimulation. In trigonal preps. contracted by NA, maximal relaxation was increased after pretreatment with L-ARG (10<sup>-3</sup> M), and the inhibitory effect of L-NOARG (10<sup>-6</sup> M) was prevented. Incubation of the trigonal strips with methylene blue had no effect on relaxations elicited at frequencies <6 Hz, but a small inhibition was obsd. at higher frequencies. Administration of NO (present in acidified soln. of NaNO<sub>2</sub>) induced concn.-dependent relaxations in trigonal preps. contracted by NA, carbachol, or ET-1. L-NOARG (10<sup>-5</sup> M) and L-ARG (10<sup>-3</sup> M) had no effect on these relaxations. However, methylene blue (10<sup>-5</sup> M) shifted the concn.-response curve for NO to the right. NANC-relaxation and NO-induced relaxation of trigonal preps. were both inhibited by oxyHb (10<sup>-5</sup> M) and pyrogallol (10<sup>-4</sup> M). In urethral preps. precontracted by NA, elec. stimulation caused frequency-dependent relaxations. A max. relaxation of 73% was obtained at 10 Hz. Also in the urethra, NANC-relaxation was blocked by L-NOARG (10<sup>-5</sup> M), and a contractile response generally appeared. **Detrusor** strips treated with alpha-.beta. methylene ATP (10<sup>-5</sup> M) and atropine (10<sup>-6</sup> M), and then contracted by ET-1, showed relaxations (19% of the induced tension) in response to elec. field stimulation (2-20 Hz) only when the tension was high. No response at all, or small contractions, were found in response to elec. stimulation in K<sup>+</sup> (35 mM)-contracted **detrusor** strips. **Detrusor** preps. contracted by carbachol were concn.-dependently relaxed by exogenously administered NO, SIN-1 (NO-donor), and isoprenaline, whereas vasoactive intestinal polypeptide

had minor effects. NO and SIN-1 induced maximal relaxations of 63 and 70%, resp., of the tension induced by carbachol. Isoprenaline produced an almost complete relaxation (96%). Thus, NANC-nerve mediated relaxation, involving the L-ARG/NO pathway, can be demonstrated consistently in the pig trigonal and urethral, but not in **detrusor** smooth muscle.

ST nitric oxide urinary tract muscle  
IT Urethra  
    (relaxation of smooth muscle of, nonadrenergic-noncholinergic neurotransmission-induced, nitric oxide in)  
IT Neuromuscular transmission  
    (nonadrenergic-noncholinergic, urinary tract smooth muscle relaxation induction by, nitric oxide in)  
IT Bladder  
    (trigone, relaxation of smooth muscle of, nonadrenergic-noncholinergic neurotransmission-induced, nitric oxide in)  
IT 10102-43-9, Nitric oxide, biological studies  
RL: BIOL (Biological study)  
    (in nonadrenergic-noncholinergic neurotransmission-induced relaxation of urinary tract smooth muscle)

=> d 117 29 all

L17 ANSWER 29 OF 31 CAPLUS COPYRIGHT 2002 ACS  
AN 1993:252196 CAPLUS  
DN 118:252196  
TI Partial mediation by nitric oxide of the relaxation of human isolated **detrusor** strips in response to electrical field stimulation  
AU James, M. J.; Birmingham, A. T.; Hill, S. J.  
CS Med. Sch., Univ. Nottingham, Nottingham, NG7 2UH, UK  
SO British Journal of Clinical Pharmacology (1993), 35(4), 366-72  
CODEN: BCPHBM; ISSN: 0306-5251  
DT Journal  
LA English  
CC 13-6 (Mammalian Biochemistry)  
AB A method for reproducing relaxation of human isolated **detrusor** smooth muscle in vitro in response to elec. field stimulation is described. The parameters of stimulation assocd. with relaxation were those which would be expected to give a largely nerve-mediated response: the relaxations were not reduced by tetrodotoxin (3 .times. 10<sup>-7</sup> M) and were therefore not dependent on voltage sensitive sodium channels. The relaxations were decreased (mean 74.1%) by nitro L-arginine (NOARG, 10<sup>-5</sup> M). Methylene blue (10<sup>-5</sup> M), an inhibitor of sol. guanylate cyclase, abolished the relaxations. These results indicate that there may be a relaxation mechanism in the human bladder which is at least partly mediated via the prodn. of nitric oxide.  
ST nitric oxide **detrusor** muscle bladder relaxation  
IT Bladder  
    (relaxation in, nitric oxide mediation of)  
IT Bladder  
    (**detrusor** muscle, nitric oxide mediation of relaxation of, in human bladder)  
IT 10102-43-9, Nitric oxide, biological studies  
RL: BIOL (Biological study)  
    (role in human bladder relaxation)

=> d 117 28 all

L17 ANSWER 28 OF 31 CAPLUS COPYRIGHT 2002 ACS  
AN 1993:486878 CAPLUS  
DN 119:86878

TI Nitric oxide and nonadrenergic, noncholinergic nerve-mediated relaxation  
of isolated pig and rabbit urethral and pig trigonal smooth muscle  
AU Persson, K.; Garcia-Pascual, A.; Forman, A.; Toetstrup, A.; Andersson, K.  
E.  
CS Dep. Clin. Pharmacol., Lund Univ. Hosp., Lund, Swed.  
SO Biol. Nitric Oxide, Proc. Int. Meet., 2nd (1992), Meeting Date 1991,  
Volume 1, 312-16. Editor(s): Moncada, Salvador. Publisher: Portland  
Press, London, UK.  
CODEN: 59AFA7  
DT Conference  
LA English  
CC 2-8 (Mammalian Hormones)  
AB The present study shows that nonadrenergic-noncholinergic-mediated  
relaxation, involving the L-arginine:NO pathway, can be demonstrated in  
the trigonal and urethral, but not in the **detrusor** smooth  
muscle. The importance of this pathway for lower-urinary-tract physiol.  
and pathophysiol. remains to be established.  
ST urinary tract nonadrenergic noncholinergic nitric oxide  
IT Urinary tract  
    (nonadrenergic-noncholinergic nerve-mediated relaxation of smooth  
    muscle of, nitric oxide mediation of)  
IT Nerve  
    (nonadrenergic-noncholinergic, urinary tract smooth muscle relaxation  
    by stimulation of, nitric oxide mediation of)  
IT 10102-43-9, Nitric oxide, biological studies  
RL: BIOL (Biological study)  
    (urinary tract smooth muscle relaxation response to  
    nonadrenergic-noncholinergic nerve stimulation mediation by)

=> d 117 17 all

L17 ANSWER 17 OF 31 CAPLUS COPYRIGHT 2002 ACS  
AN 1996:447425 CAPLUS  
DN 125:105692  
TI Effects of nitric oxide on **detrusor** relaxation  
AU Chung, Byung Ha; Choi, Seung Kang; Chang, Ki Churl  
CS College Medicine, Yonsei University, Seoul, S. Korea  
SO Journal of Urology (Baltimore) (1996), 155(6), 2090-2093  
CODEN: JOURAA; ISSN: 0022-5347  
PB Williams & Wilkins  
DT Journal  
LA English  
CC 2-8 (Mammalian Hormones)  
AB This study was designed to characterize the effect of NO, exploiting the  
photo-induced adequate NP (PIANO) system, on rat **detrusor**  
relaxation by isometric tension recording and measuring changes in cGMP  
content. Exposure to UV light was used (1-60 s) to evoke PIANO in the  
presence of streptozotocin, an NO carrier, and N.omega.-nitro-L-arginine  
(L-NOARG), an NO<sub>2</sub>-carrier. During relaxation the cGMP content was  
measured by RIA. Rat **detrusor** strips were reversibly relaxed  
upon NO generation via PIANO. Pyrogallol, an O<sub>2</sub> generator, significantly  
diminished PIANO-mediated relaxation. During PIANO-mediated relaxation,  
the tissue level of cGMP significantly increased over that of the control.  
Furthermore, methylene blue, a guanylate cyclase inhibitor, significantly  
inhibited both the relaxation and the increase of cGMP. Thus, the rat  
**detrusor** muscle is capable of responding to NO, and these findings  
might lead to a treatment for bladder instability and **detrusor**  
hyperreflexia by the use of intravesical instillation of NO donors.  
ST nitric oxide **detrusor** muscle relaxation; bladder relaxation cGMP  
nitric oxide  
IT Bladder

(**detrusor** muscle, effects of nitric oxide on **detrusor**  
muscle relaxation and cGMP)  
IT 7782-44-7, Oxygen, biological studies  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(effects of nitric oxide and oxygen on **detrusor** muscle relaxation and cGMP)  
IT 10102-43-9, Nitric oxide, biological studies  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(effects of nitric oxide on **detrusor** muscle relaxation and cGMP)  
IT 7665-99-8, CGMP  
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)  
(effects of nitric oxide on **detrusor** muscle relaxation and cGMP)

=> d his

(FILE 'HOME' ENTERED AT 12:43:00 ON 17 OCT 2002)

FILE 'REGISTRY' ENTERED AT 12:44:28 ON 17 OCT 2002

L1 51 S INDOMETHACIN  
L2 75 S NAPROXEN  
L3 6 S NIMESULIDE  
L4 13 S NITROGLYCERIN  
L5 443 S NITRIC OXIDE

FILE 'CAPLUS' ENTERED AT 12:48:44 ON 17 OCT 2002

E MICTURITION  
L6 861 S E3-E6  
E BLADDER  
L7 24458 S E3  
E INCONTINENCE  
L8 2013 S E3-E7  
E URINARY  
L9 107957 S E3  
L10 6048 S L4  
L11 76683 S L5  
L12 1 S L6 AND L10  
L13 27 S L6 AND L11  
E DETRUSOR  
L14 966 S E3-E6  
L15 1 S L14 AND L10  
L16 38 S L14 AND L11  
L17 31 S L16 NOT L13

=> s l8 and l10

L18 10 L8 AND L10

=> d l18 4-10

L18 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2002 ACS  
AN 2001:5914 CAPLUS  
DN 135:102290  
TI Double-blind manometric assessment of two topical glyceryl trinitrate formulations in patients with chronic anal fissures  
AU Bassotti, G.; Clementi, M.; Ceccarelli, F.; Pelli, M. A.  
CS Department of Clinical and Experimental Medicine, University of Perugia  
School of Medicine, Perugia, 06100, Italy

SO Digestive and Liver Disease (2000), 32(8), 699-702

CODEN: DLDIFK

PB Pacini Editore

DT Journal

LA English

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2002 ACS

AN 1999:465629 CAPLUS

DN 131:125392

TI A comparison of injections of botulinum toxin and topical nitroglycerin ointment for the treatment of chronic anal fissure

AU Brisinda, Giuseppe; Maria, Giorgio; Bentivoglio, Anna Rita; Cassetta, Emanuele; Gui, Daniele; Albanese, Alberto

CS Institute of Surgery, Catholic University of Rome, Rome, 00168, Italy

SO New England Journal of Medicine (1999), 341(2), 65-69

CODEN: NEJMAG; ISSN: 0028-4793

PB Massachusetts Medical Society

DT Journal

LA English

RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2002 ACS

AN 1997:499098 CAPLUS

DN 127:156731

TI Treatment of urinary **incontinence** with nitric oxide synthase substrates and/or nitric oxide donors

IN Garfield, Robert E.; Chwalisz, Kristof

PA Schering A.-G., Germany; Board of Regents the University of Texas System

SO PCT Int. Appl., 30 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9725984	A1	19970724	WO 1997-US795	19970121
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	US 5789442	A	19980804	US 1996-588586	19960118
	ZA 9700458	A	19980714	ZA 1997-458	19970120
	AU 9717031	A1	19970811	AU 1997-17031	19970121
	AU 721998	B2	20000720		
	EP 874627	A1	19981104	EP 1997-902990	19970121
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	CN 1208346	A	19990217	CN 1997-191745	19970121
	BR 9707026	A	19990720	BR 1997-7026	19970121
	JP 11512748	T2	19991102	JP 1997-526227	19970121
	US 6028106	A	20000222	US 1997-960365	19971029
	NO 9803288	A	19980917	NO 1998-3288	19980716
PRAI	US 1996-588586	A	19960118		
	WO 1997-US795	W	19970121		

L18 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2002 ACS  
AN 1995:793005 CAPLUS  
DN 123:188641  
TI Nitric oxide synthase inhibitors for the treatment of male sexual dysfunctions  
IN Snyder, Solomon H.; Burnett, Arthur L.; Lowenstein, Charles J.; Bredt, David S.; Chang, Thomas S. K.  
PA The Johns Hopkins University, USA  
SO U.S., 7 pp.  
CODEN: USXXAM  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5439938	A	19950808	US 1993-43821	19930407

L18 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2002 ACS  
AN 1995:723143 CAPLUS  
DN 123:102794  
TI Pharmaceutical compositions and use thereof for treatment of neurological diseases and etiologically related symptomatology.  
IN Shapiro, Howard K.  
PA USA  
SO PCT Int. Appl., 155 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9501096	A1	19950112	WO 1994-US7277	19940628
	W: AU, CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5668117	A	19970916	US 1993-62201	19930629
	AU 9472144	A1	19950124	AU 1994-72144	19940628
	AU 692454	B2	19980611		
	EP 707446	A1	19960424	EP 1994-921405	19940628
	R: DE, FR, GB, IT				
	JP 08512055	T2	19961217	JP 1994-503597	19940628
PRAI	US 1993-62201		19930629		
	US 1991-660561		19910222		
	US 1993-26617		19930223		
	WO 1994-US7277		19940628		

L18 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2002 ACS  
AN 1982:193181 CAPLUS  
DN 96:193181  
TI Toxicological studies on nitroglycerin (NK-843). V. Intravenous subacute toxicity in dog  
AU Oketani, Yoneshiro; Mitsuzono, Toji; Ichikawa, Koichi; Itono, Yuichi; Gojo, Takao; Gofuku, Masaya; Konoha, Noriyasu  
CS New Drug Dev. Res. Cent., Inc., Iwamizawa, Japan  
SO Iyakuhin Kenkyu (1982), 13(1), 125-44  
CODEN: IYKEDH  
DT Journal  
LA Japanese

L18 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2002 ACS  
AN 1982:115734 CAPLUS  
DN 96:115734  
TI Toxicological studies on nitroglycerin (NK-843). 4. Acute toxicity in

AU dogs  
AU Oketani, Yoneshiro; Mitsuzono, Toji; Ichikawa, Koichi; Itono, Yuichi;  
Gojo, Takao; Gofuku, Masaya; Konoha, Noriyasu  
CS New Drug Dev. Res. Cent. Inc., Iwamizawa, 069-03, Japan  
SO Oyo Yakuri (1981), 22(5), 629-32  
CODEN: OYYAA2; ISSN: 0369-8033  
DT Journal  
LA Japanese

=> s 18 and l11  
L19 21 L8 AND L11

=> s l19 not l18  
L20 16 L19 NOT L18

=> d 120 6-16

L20 ANSWER 6 OF 16 CAPLUS COPYRIGHT 2002 ACS  
AN 2001:816459 CAPLUS  
DN 135:339302  
TI Methods and compositions for enhancing cellular function through protection of tissue components  
IN Frey, William H., II; Fawcett, John Randall; Thorne, Robert Gary; Chen, Xueqing  
PA Healthpartners Research Foundation, USA  
SO PCT Int. Appl., 77 pp.  
CODEN: PIXXD2  
DT Patent  
LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001082932	A2	20011108	WO 2001-US13931	20010430
WO 2001082932	A3	20020718		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 2002028786	A1	20020307	US 2001-844450	20010427
PRAI US 2000-200843P	P	20000501		
US 2000-230263P	P	20000906		
US 2000-233025P	P	20000915		
US 2000-233263P	P	20000918		
OS MARPAT 135:339302				

L20 ANSWER 7 OF 16 CAPLUS COPYRIGHT 2002 ACS  
AN 2001:511911 CAPLUS  
DN 136:240865  
TI Review article: the pharmacology of the internal anal sphincter and new treatments of ano-rectal disorders  
AU Cook, T. A.; Brading, A. F.; Mortensen, N. J. McC.  
CS University Department of Pharmacology and Department of Colorectal Surgery, John Radcliffe Hospital, Oxford, OX3 9 OU, UK  
SO Alimentary Pharmacology and Therapeutics (2001), 15(7), 887-898  
CODEN: APTHEN; ISSN: 0269-2813  
PB Blackwell Science Ltd.

DT Journal; General Review

LA English

RE.CNT 101 THERE ARE 101 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 8 OF 16 CAPLUS COPYRIGHT 2002 ACS

AN 2001:31317 CAPLUS

DN 134:105849

TI Highly selective norepinephrine reuptake inhibitors and methods of using the same

IN Wong, Erik H. F.; Ahmed, Saeeduddin; Marshall, Robert Clyde; McArthur, Robert; Taylor, Duncan P.; Birgerson, Lars; Cetera, Pasquale

PA Pharmacia & Upjohn Company, USA

SO PCT Int. Appl., 48 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001001973	A2	20010111	WO 2000-US17256	20000622
	WO 2001001973	A3	20020117		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	EP 1196172	A2	20020417	EP 2000-941659	20000622
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
	BR 2000012136	A	20020611	BR 2000-12136	20000622
	US 6465458	B1	20021015	US 2000-599213	20000622
	US 2002061910	A1	20020523	US 2001-20261	20011214
	NO 2001006406	A	20020219	NO 2001-6406	20011228
	US 2002086864	A1	20020704	US 2002-37344	20020104
	US 2002128173	A1	20020912	US 2002-99334	20020104
	US 2002107249	A1	20020808	US 2002-55663	20020123
PRAI	US 1999-141968P	P	19990701		
	US 1999-144131P	P	19990716		
	US 1999-158256P	P	19991006		
	US 1999-170381P	P	19991213		
	US 2000-599213	A3	20000622		
	WO 2000-US17256	W	20000622		

L20 ANSWER 9 OF 16 CAPLUS COPYRIGHT 2002 ACS

AN 2000:814310 CAPLUS

DN 133:359255

TI Nitrosated and nitrosylated potassium channel activators, compositions, and methods of use

IN Garvey, David S.; Saenz De Tejada, Inigo

PA Nitromed, Inc., USA

SO PCT Int. Appl., 112 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI WO 2000067754 A1 20001116 WO 2000-US12957 20000512  
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,  
CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,  
ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,  
LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,  
SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA,  
ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,  
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,  
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 6417207 B1 20020709 US 2000-570727 20000512  
US 2002143188 A1 20021003 US 2002-154916 20020528

PRAI US 1999-133888P P 19990512  
US 2000-570727 A3 20000512

OS MARPAT 133:359255

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 10 OF 16 CAPLUS COPYRIGHT 2002 ACS

AN 1999:731703 CAPLUS

DN 132:202450

TI HCT-1026: Treatment of septic shock, treatment of urinary  
incontinence, treatment of osteoporosis, nitric oxide donor

AU Burgaud, J. L.; Benedini, F.; Robinson, E. M.; Del Soldato, P.

CS NicOx, Valbonne, 06560, Fr.

SO Drugs of the Future (1999), 24(8), 858-861

CODEN: DRFUD4; ISSN: 0377-8282

PB Prous Science

DT Journal; General Review

LA English

RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2002 ACS

AN 1999:722933 CAPLUS

DN 131:332126

TI Muscle-derived cell mediated gene delivery for treating muscle- and  
bone-related injury or dysfunction

IN Chancellor, Michael B.; Huard, Johnny

PA University of Pittsburgh, USA

SO PCT Int. Appl., 140 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	-----	-----	-----	-----
PI WO 9956785	A2	19991111	WO 1999-US9451	19990430
WO 9956785	A3	20010419		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2330660	AA	19991111	CA 1999-2330660	19990430
AU 9937757	A1	19991123	AU 1999-37757	19990430
EP 1113807	A2	20010711	EP 1999-920202	19990430
R: AT, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

PRAI US 1998-83917P P 19980501  
WO 1999-US9451 W 19990430

L20 ANSWER 12 OF 16 CAPLUS COPYRIGHT 2002 ACS  
AN 1999:596856 CAPLUS  
DN 131:223509  
TI Pharmaceuticals containing inhibitory nonadrenergic-noncholinergic nerve function activators  
IN Omura, Shigeki; Matsunaga, Koichi; Mizuno, Noriko  
PA Tokyo Tanabe Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 4 pp.  
CODEN: JKXXAF

DT Patent  
LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 11255668	A2	19990921	JP 1998-56812	19980309

L20 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2002 ACS  
AN 1998:479406 CAPLUS  
DN 129:86054  
TI Pharmaceutical composition for treating fecal **incontinence** and anal itch  
IN Kamm, Michael Albert; Phillips, Robin Kenneth Stewart  
PA UK  
SO PCT Int. Appl., 28 pp.  
CODEN: PIXXD2

DT Patent  
LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	-----	-----	-----	-----
PI WO 9827971	A1	19980702	WO 1997-GB3525	19971223
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9853315	A1	19980717	AU 1998-53315	19971223
AU 728889	B2	20010118		
EP 946155	A1	19991006	EP 1997-950311	19971223
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI JP 2001507020	T2	20010529	JP 1998-528550	19971223
PRAI GB 1996-26739	A	19961223		
GB 1996-26750	A	19961223		
GB 1997-3309	A	19970218		
WO 1997-GB3525	W	19971223		

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 14 OF 16 CAPLUS COPYRIGHT 2002 ACS  
AN 1998:383264 CAPLUS  
DN 129:104501  
TI Oxytocin-induced stimulation and inhibition of bladder activity in normal, conscious rats-influence of nitric oxide synthase inhibition  
AU Pandita, R. K.; Nylen, A.; Andersson, K. -E.  
CS Department of Clinical Pharmacology, Lund University Hospital, Lund, Swed.  
SO Neuroscience (Oxford) (1998), 85(4), 1113-1119

PB CODEN: NRSCDN; ISSN: 0306-4522  
Elsevier Science Ltd.  
DT Journal  
LA English

L20 ANSWER 15 OF 16 CAPLUS COPYRIGHT 2002 ACS  
AN 1997:568140 CAPLUS  
DN 127:215960  
TI Novel penile neuronal nitric oxide synthase (RPnNOS) and applications for diagnosis and treatment of urogenital disorders  
IN Gonzalez-Cadavid, Nestor F.; Rajfer, Jacob  
PA Gonzalez-Cadavid, Nestor F., USA; Rajfer, Jacob  
SO PCT Int. Appl., 78 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9730066	A1	19970821	WO 1997-US1565	19970213
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9718509	A1	19970902	AU 1997-18509	19970213
PRAI US 1996-11707P	P	19960215		
US 1996-17371P	P	19960510		
US 1996-31550P	P	19961203		
WO 1997-US1565	W	19970213		

L20 ANSWER 16 OF 16 CAPLUS COPYRIGHT 2002 ACS  
AN 1993:509502 CAPLUS  
DN 119:109502  
TI Nitric oxide mediates nonadrenergic, noncholinergic relaxation of the smooth muscle sphincter of the urinary bladder  
AU Thornbury, K. D.; Hollywood, M. A.; McHale, N. G.  
CS Sch. Biomed. Sci., Queen's Univ., Belfast, BT9 7BL, UK  
SO Biol. Nitric Oxide, Proc. Int. Meet., 2nd (1992), Meeting Date 1991,  
Volume 1, 309-12. Editor(s): Moncada, Salvador. Publisher: Portland Press, London, UK.  
CODEN: 59AFA7  
DT Conference  
LA English

=> d 120 16 all

L20 ANSWER 16 OF 16 CAPLUS COPYRIGHT 2002 ACS  
AN 1993:509502 CAPLUS  
DN 119:109502  
TI Nitric oxide mediates nonadrenergic, noncholinergic relaxation of the smooth muscle sphincter of the urinary bladder  
AU Thornbury, K. D.; Hollywood, M. A.; McHale, N. G.  
CS Sch. Biomed. Sci., Queen's Univ., Belfast, BT9 7BL, UK  
SO Biol. Nitric Oxide, Proc. Int. Meet., 2nd (1992), Meeting Date 1991,  
Volume 1, 309-12. Editor(s): Moncada, Salvador. Publisher: Portland Press, London, UK.  
CODEN: 59AFA7

DT Conference  
LA English  
CC 2-8 (Mammalian Hormones)  
AB The results of the present study demonstrate that nonadrenergic-noncholinergic (NANC) relaxation and after-contraction in the smooth muscle sphincter of the bladder depend on synthesis and release of NO or a closely related compd. The demonstration that relaxation of the internal sphincter is antagonized by the NO synthase inhibitor, L-NAME, provides an opportunity to assess the role of inhibitory NANC nerves in vivo, and may improve understanding of clin. conditions such as stress **incontinence**, urge **incontinence** and urinary retention.  
ST bladder relaxation nonadrenergic noncholinergic nitric oxide  
IT Bladder  
    (nonadrenergic noncholinergic relaxation of, nitric oxide mediation of)  
IT Nervous system  
    (nonadrenergic-noncholinergic, bladder relaxation by, nitric oxide mediation of)  
IT 10102-43-9, Nitric oxide, biological studies  
RL: BIOL (Biological study)  
    (nonadrenergic noncholinergic bladder relaxation mediation by)

=> s 19 and 111  
L21        757 L9 AND L11  
  
=> s 121 and 11  
        12239 L1  
L22        3 L21 AND L1

=> d 122 1-3

L22 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2002 ACS  
AN 2002:665046 CAPLUS  
DN 137:226422  
TI Increased **urinary** nitrite excretion in primary enuresis: effects of indomethacin treatment on **urinary** and serum osmolality and electrolytes, **urinary** volumes and nitrite excretion  
AU Al-Waili, N. S.  
CS Dubai Specialized Medical Center and Medical Research Laboratories, Islamic Establishment for Education, Dubai, United Arab Emirates  
SO BJU International (2002), 90(3), 294-301  
CODEN: BJINFO; ISSN: 1464-4096  
PB Blackwell Science Ltd.  
DT Journal  
LA English

RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2002 ACS  
AN 2002:658295 CAPLUS  
DN 137:212221  
TI Rat toxicologically relevant genes and use in microarrays to evaluate toxicity of toxic agents  
IN Farris, Georgia; Hicken, Samuel H.; Farr, Spencer B.  
PA Phase-1 Molecular Toxicology, Inc., USA  
SO PCT Int. Appl., 388 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI WO 2002066682 A2 20020829 WO 2002-US2935 20020129  
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,  
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,  
UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,  
TJ, TM  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,  
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,  
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
PRAI US 2001-264933P P 20010129  
US 2001-308161P P 20010726

L22 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2002 ACS  
AN 1997:561656 CAPLUS  
DN 127:214807  
TI Pharmacological protection of NSAID-induced intestinal permeability in the rat: effect of tempo and metronidazole as potential free radical scavengers  
AU Davies, Neal M.; Jamali, Fakhreddin  
CS Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta, Edmonton, AB, T6G 2N8, Can.  
SO Human & Experimental Toxicology (1997), 16(7), 345-349  
CODEN: HETOEA; ISSN: 0960-3271  
PB Stockton  
DT Journal  
LA English

=> d his

(FILE 'HOME' ENTERED AT 12:43:00 ON 17 OCT 2002)

FILE 'REGISTRY' ENTERED AT 12:44:28 ON 17 OCT 2002

L1 51 S INDOMETHACIN  
L2 75 S NAPROXEN  
L3 6 S NIMESULIDE  
L4 13 S NITROGLYCERIN  
L5 443 S NITRIC OXIDE

FILE 'CAPLUS' ENTERED AT 12:48:44 ON 17 OCT 2002

E MICTURITION  
L6 861 S E3-E6  
E BLADDER  
L7 24458 S E3  
E INCONTINENCE  
L8 2013 S E3-E7  
E URINARY  
L9 107957 S E3  
L10 6048 S L4  
L11 76683 S L5  
L12 1 S L6 AND L10  
L13 27 S L6 AND L11  
E DETRUSOR  
L14 966 S E3-E6  
L15 1 S L14 AND L10  
L16 38 S L14 AND L11  
L17 31 S L16 NOT L13  
L18 10 S L8 AND L10  
L19 21 S L8 AND L11  
L20 16 S L19 NOT L18

L21            757 S L9 AND L11  
L22            3 S L21 AND L1

=> s 11  
L23        12239 L1

=> s 12  
L24        7053 L2

=> s 13  
L25        553 L3

=> s 123 and 114  
L26        17 L23 AND L14

=> d 126 7-17

L26 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2002 ACS  
AN 1988:565184 CAPLUS  
DN 109:165184  
TI The contribution of sensory nerves to xylene-induced cystitis in rats  
AU Maggi, C. A.; Abelli, L.; Giuliani, S.; Santicioli, P.; Geppetti, P.;  
Somma, V.; Frilli, S.; Meli, A.  
CS Pharmacol. Dep., A. Menarini Pharm., Florence, 50131, Italy  
SO Neuroscience (Oxford) (1988), 26(2), 709-23  
CODEN: NRSCDN; ISSN: 0306-4522  
DT Journal  
LA English

L26 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2002 ACS  
AN 1986:564642 CAPLUS  
DN 105:164642  
TI Preferential antagonism of tiaramide to prostaglandin E2-induced  
contraction in isolated rabbit **detrusor**  
AU Nakanishi, Hironori; Yoshida, Hirohide; Shirasaka, Masayoshi; Ono,  
Tomoyuki; Matsuoka, Isao; Nakahata, Norimichi  
CS Dep. Pharmacol., Fukushima Med. Coll., Fukushima, 960, Japan  
SO Fukushima J. Med. Sci. (1985), 31(2), 63-70  
CODEN: FJMSAU; ISSN: 0016-2590  
DT Journal  
LA English

L26 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2002 ACS  
AN 1984:563362 CAPLUS  
DN 101:163362  
TI Evidence for the involvement of arachidonic acid metabolites in  
spontaneous and drug-induced contractions of rat urinary bladder  
AU Maggi, Carlo Alberto; Evangelista, Stefano; Grimaldi, Guglielmo;  
Santicioli, Paolo; Giolitti, Alessandro; Meli, Alberto  
CS Pharmacol. Dep., Menarini Pharm., Florence, 50131, Italy  
SO J. Pharmacol. Exp. Ther. (1984), 230(2), 500-13  
CODEN: JPETAB; ISSN: 0022-3565  
DT Journal  
LA English

L26 ANSWER 10 OF 17 CAPLUS COPYRIGHT 2002 ACS  
AN 1983:516005 CAPLUS  
DN 99:116005  
TI Neurotransmission in activation of the contractile response in the human  
urinary bladder  
AU Nergaardh, Arne; Kinn, Anne Charlotte  
CS Dep. Pediatr., Karolinska Hosp., Stockholm, S-104 01, Swed.

- SO Scand. J. Urol. Nephrol. (1983), 17(2), 153-7  
CODEN: SJUNAS; ISSN: 0036-5599  
DT Journal  
LA English
- L26 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2002 ACS  
AN 1981:41630 CAPLUS  
DN 94:41630  
TI **Detrusor** dynamics. II. Effect of prostaglandins and their synthesis inhibitor on stress-relaxation time course  
AU Abdel-Rahman, M.; Coulombe, A.; Elhilali, M. M.  
CS Dep. Urol. Biophys., Cent. Hosp. Univ., Sherbrooke, PQ, Can.  
SO Invest. Urol. (1981), 18(4), 281-4  
CODEN: INURAQ; ISSN: 0021-0005  
DT Journal  
LA English
- L26 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2002 ACS  
AN 1979:468451 CAPLUS  
DN 91:68451  
TI Inhibition of ATP-induced contraction in the guinea pig urinary bladder in vitro and in vivo  
AU Sjogren, C.; Andersson, K. E.  
CS Res. Lab., AB Leo, Helsingborg, Swed.  
SO Acta Pharmacol. Toxicol. (1979), 44(3), 221-7  
CODEN: APTOA6; ISSN: 0001-6683  
DT Journal  
LA English
- L26 ANSWER 13 OF 17 CAPLUS COPYRIGHT 2002 ACS  
AN 1978:557176 CAPLUS  
DN 89:157176  
TI Purinergic innervation of the guinea-pig urinary bladder  
AU Burnstock, G.; Cocks, T.; Crowe, R.; Kasakov, L.  
CS Dep. Anat. Embryol., Univ. Coll., London, Engl.  
SO Br. J. Pharmacol. (1978), 63(1), 125-38  
CODEN: BJPCBM; ISSN: 0007-1188  
DT Journal  
LA English
- L26 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2002 ACS  
AN 1978:146643 CAPLUS  
DN 88:146643  
TI Interactions of calcium, prostaglandins and indomethacin on the smooth muscle of the bladder  
AU Anderson, Gordon F.; Kohn, Kenneth I.  
CS Dep. Pharmacol., Wayne State Univ. Sch. Med., Detroit, Mich., USA  
SO Pharmacology (1978), 16(6), 306-13  
CODEN: PHMGBN; ISSN: 0031-7012  
DT Journal  
LA English
- L26 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2002 ACS  
AN 1977:400558 CAPLUS  
DN 87:558  
TI Clinical and experimental studies on the action of prostaglandins and their synthesis inhibitors on **detrusor** muscle in vitro and in vivo  
AU Bultitude, M. I.; Hills, N. H.; Shuttleworth, K. E. D.  
CS Dep. Urol., St. Thomas's Hosp., London, Engl.  
SO Br. J. Urol. (1976), 48(7), 631-7  
CODEN: BJURAN

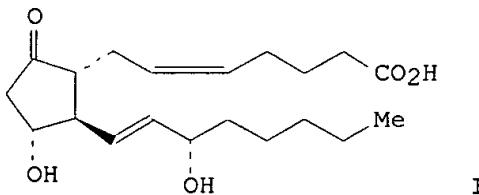
DT Journal  
LA English

L26 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2002 ACS  
AN 1976:554249 CAPLUS  
DN 85:154249  
TI Prostaglandins and tone in isolated strips of mammalian bladder  
AU Hills, N. H.  
CS Dep. Urol., St. Thomas' Hosp., London, Engl.  
SO Br. J. Pharmacol. (1976), 57(3), 464P-465P  
CODEN: BJPCBM  
DT Journal  
LA English

L26 ANSWER 17 OF 17 CAPLUS COPYRIGHT 2002 ACS  
AN 1976:440700 CAPLUS  
DN 85:40700  
TI Evidence for a role of prostaglandins in atropine-resistant transmission  
in the mammalian urinary bladder  
AU Johns, Anthony; Paton, David M.  
CS Dep. Pharmacol., Univ. Alberta, Edmonton, Alberta, Can.  
SO Prostaglandins (1976), 11(3), 595-7  
CODEN: PRGLBA  
DT Journal  
LA English

=> d 126 14 all

L26 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2002 ACS  
AN 1978:146643 CAPLUS  
DN 88:146643  
TI Interactions of calcium, prostaglandins and indomethacin on the smooth  
muscle of the bladder  
AU Anderson, Gordon F.; Kohn, Kenneth I.  
CS Dep. Pharmacol., Wayne State Univ. Sch. Med., Detroit, Mich., USA  
SO Pharmacology (1978), 16(6), 306-13  
CODEN: PHMGBN; ISSN: 0031-7012  
DT Journal  
LA English  
CC 2-5 (Hormone Pharmacology)  
GI



AB The effects of PGE<sub>2</sub> (I) [363-24-6], PGF<sub>2</sub>.alpha. [551-11-1] and  
indomethacin (II) [53-86-1] were studied on isolated rabbit  
detrusor smooth muscle strips in balanced salt soln. and in 80 mM  
K<sup>+</sup> depolarizing soln. The addn. of II to the smooth muscle prepn. at  
0.1-1.0 .mu.M produced depression of spontaneous motility that was  
partially antagonized by I or by elevating the extracellular Ca<sup>2+</sup> level.  
Alone, both I and Ca<sup>2+</sup> caused a marked increase in motility, increasing  
both frequency and amplitude. In low Ca<sup>2+</sup>, K<sup>+</sup> depolarized bathing medium

with 0.1 mM EGTA added, I or PGF2.alpha. augmented Ca<sup>2+</sup> contractures both in velocity and amplitude, whereas either prostaglandin without Ca<sup>2+</sup> had not effect on the smooth muscle. II produced a noncompetitive antagonism of the Ca<sup>2+</sup> dose response curve in 80 mM K<sup>+</sup> depolarized prepns. suggesting a direct effect on Ca<sup>2+</sup> flux. II also depressed both prostaglandin and Ca<sup>2+</sup> contractures in terms of velocity and magnitude, suggesting that it may act at Ca<sup>2+</sup> channels in addn. to its action on prostaglandin synthetase. These data support the work of others who suggest that prostaglandins may augment Ca<sup>2+</sup> permeability, acting at the Ca<sup>2+</sup> channel or as carriers for Ca<sup>2+</sup> across smooth muscle cell membrane.

ST calcium indomethacin prostaglandin bladder  
IT Bladder  
    (contraction of, calcium and indomethacin and prostaglandin interaction in)  
IT 363-24-6 551-11-1  
RL: BIOL (Biological study)  
    (bladder response to, calcium and indomethacin interaction in)  
IT 53-86-1  
RL: BIOL (Biological study)  
    (bladder response to, calcium and prostaglandins interaction in)  
IT 7440-70-2, biological studies  
RL: BIOL (Biological study)  
    (bladder response to, indomethacin and prostaglandins interaction in)

=> s 124 and 114  
L27           0 L24 AND L14

=> d his

(FILE 'HOME' ENTERED AT 12:43:00 ON 17 OCT 2002)

FILE 'REGISTRY' ENTERED AT 12:44:28 ON 17 OCT 2002

L1       51 S INDOMETHACIN  
L2       75 S NAPROXEN  
L3       6 S NIMESULIDE  
L4       13 S NITROGLYCERIN  
L5       443 S NITRIC OXIDE

FILE 'CAPLUS' ENTERED AT 12:48:44 ON 17 OCT 2002

    E MICTURITION  
L6       861 S E3-E6  
    E BLADDER  
L7       24458 S E3  
    E INCONTINENCE  
L8       2013 S E3-E7  
    E URINARY  
L9       107957 S E3  
L10      6048 S L4  
L11      76683 S L5  
L12      1 S L6 AND L10  
L13      27 S L6 AND L11  
    E DETRUSOR  
L14      966 S E3-E6  
L15      1 S L14 AND L10  
L16      38 S L14 AND L11  
L17      31 S L16 NOT L13  
L18      10 S L8 AND L10  
L19      21 S L8 AND L11  
L20      16 S L19 NOT L18  
L21      757 S L9 AND L11  
L22      3 S L21 AND L1

L23 12239 S L1  
L24 7053 S L2  
L25 553 S L3  
L26 17 S L23 AND L14  
L27 0 S L24 AND L14

=> s l25 and l14  
L28 0 L25 AND L14

=> d his

(FILE 'HOME' ENTERED AT 12:43:00 ON 17 OCT 2002)

FILE 'REGISTRY' ENTERED AT 12:44:28 ON 17 OCT 2002

L1 51 S INDOMETHACIN  
L2 75 S NAPROXEN  
L3 6 S NIMESULIDE  
L4 13 S NITROGLYCERIN  
L5 443 S NITRIC OXIDE

FILE 'CAPLUS' ENTERED AT 12:48:44 ON 17 OCT 2002

E MICTURITION  
L6 861 S E3-E6  
E BLADDER  
L7 24458 S E3  
E INCONTINENCE  
L8 2013 S E3-E7  
E URINARY  
L9 107957 S E3  
L10 6048 S L4  
L11 76683 S L5  
L12 1 S L6 AND L10  
L13 27 S L6 AND L11  
E DETRUSOR  
L14 966 S E3-E6  
L15 1 S L14 AND L10  
L16 38 S L14 AND L11  
L17 31 S L16 NOT L13  
L18 10 S L8 AND L10  
L19 21 S L8 AND L11  
L20 16 S L19 NOT L18  
L21 757 S L9 AND L11  
L22 3 S L21 AND L1  
L23 12239 S L1  
L24 7053 S L2  
L25 553 S L3  
L26 17 S L23 AND L14  
L27 0 S L24 AND L14  
L28 0 S L25 AND L14

=> s l8 and l24  
L29 3 L8 AND L24

=> d 129 1-3

L29 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2002 ACS  
AN 2001:167795 CAPLUS  
DN 134:212737  
TI Delayed-release oral pharmaceutical dosage forms  
IN Ziegler, Iris; Bartholomaeus, Johannes  
PA Gruenenthal G.m.b.H., Germany  
SO PCT Int. Appl., 30 pp.

CODEN: PIXXD2  
DT Patent  
LA German  
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001015681	A1	20010308	WO 2000-EP7525	20000803
	W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, LZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	DE 19940944	A1	20010315	DE 1999-19940944	19990831
	EP 1207867	A1	20020529	EP 2000-954585	20000803
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL			
	BR 2000013823	A	20020723	BR 2000-13823	20000803
	NO 2002000976	A	20020320	NO 2002-976	20020227
PRAI	DE 1999-19940944	A	19990831		
	WO 2000-EP7525	W	20000803		

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2002 ACS  
AN 1995:980141 CAPLUS  
DN 124:106940  
TI The effects of an estradiol transdermal therapeutic system, alone and in combination with naproxen, on urge **incontinence** in elderly women: A pilot study  
AU Blom, Marie W.; Sommers, De Klerk  
CS Faculty Medicine, University Pretoria, Pretoria, 0001, S. Afr.  
SO Current Therapeutic Research (1995), 56(10), 1100-4  
CODEN: CTCEA9; ISSN: 0011-393X  
PB Excerpta Medica  
DT Journal  
LA English

L29 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2002 ACS  
AN 1981:436699 CAPLUS  
DN 95:36699  
TI Toxicology of trimethyl- and triethyl phosphorothioates  
AU Verschoyle, R. D.; Aldridge, W. N.; Cabral, J. R. P.  
CS Toxicol. Unit, Med. Res. Coun. Lab., Carshalton/Surrey, Engl.  
SO Dev. Toxicol. Environ. Sci. (1980), 8(Mech. Toxic. Hazard Eval.), 631-4  
CODEN: DTESD7; ISSN: 0165-2214  
DT Journal  
LA English

=> d 129 2 all

L29 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2002 ACS  
AN 1995:980141 CAPLUS  
DN 124:106940  
TI The effects of an estradiol transdermal therapeutic system, alone and in combination with naproxen, on urge **incontinence** in elderly women: A pilot study  
AU Blom, Marie W.; Sommers, De Klerk

CS Faculty Medicine, University Pretoria, Pretoria, 0001, S. Afr.  
SO Current Therapeutic Research (1995), 56(10), 1100-4  
CODEN: CTCEA9; ISSN: 0011-393X  
PB Excerpta Medica  
DT Journal  
LA English  
CC 2-4 (Mammalian Hormones)  
Section cross-reference(s): 63  
AB The aim of this study was to evaluate the effects of a transdermal estradiol delivery system, alone and in combination with naproxen, in elderly women with confirmed urge **incontinence**. An open-label, single-blind pilot study was conducted in which an estradiol transdermal therapeutic system (TTS) alone, or combined with naproxen 250-mg tablets twice daily, or placebo TTS were given according to a randomized, crossover design for a period of 8 wk. Cystometric examn. was performed after each medication session. A washout period of 2 wk followed each medication session. Bladder-diary charts were completed by each patient and evaluated as a subjective measure of that patient's symptoms esp. with regard to frequency of urination, nocturia, and episodes of **incontinence**. Sixteen participants completed the study. Estradiol TTS as well as estradiol TTS plus naproxen increased bladder capacity significantly ( $P < 0.05$ ) when compared with placebo. The vol. at which the first urge to void was perceived was increased significantly ( $P = 0.01$ ) by estradiol TTS plus naproxen compared with placebo. These results suggest that estrogen alleviates urge **incontinence**.  
ST estradiol naproxen urine urge **incontinence**  
IT Bladder  
(disease, **incontinence**, urge; effects of estradiol transdermal therapeutic system, alone and in combination with naproxen, on urge **incontinence** in elderly women)  
IT Pharmaceutical dosage forms  
(transdermal, effects of estradiol transdermal therapeutic system, alone and in combination with naproxen, on urge **incontinence** in elderly women)  
IT 50-28-2, Estradiol, biological studies 22204-53-1, Naproxen  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(effects of estradiol transdermal therapeutic system, alone and in combination with naproxen, on urge **incontinence** in elderly women)

=> s 18 and 125  
L30 2 L8 AND L25

=> d 130 1-2

L30 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2002 ACS  
AN 1998:534795 CAPLUS  
DN 129:153255  
TI Controlled-release formulations for treating early morning pathologies  
IN Busetti, Cesare; Crimella, Tiziano  
PA Poli Industria Chimica Spa, Italy  
SO U.S., 9 pp.  
CODEN: USXXAM  
DT Patent  
LA English  
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	-----	-----	-----	-----
PI US 5788987	A	19980804	US 1997-790514	19970129

WO 9832425	A1	19980730	WO 1997-IB1632	19971216
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GM, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
AU 9853356	A1	19980818	AU 1998-53356	19971216
EP 954292	A1	19991110	EP 1997-950352	19971216
R:	BE, DE, ES, FR, GB, PT			
JP 2001511126	T2	20010807	JP 1998-531769	19971216
PRAI US 1997-790514	A	19970129		
WO 1997-IB1632	W	19971216		

L30 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2002 ACS

AN 1998:175910 CAPLUS

DN 128:217188

TI Preparation of nitric ester derivatives and their use in urinary **incontinence** and other diseases

IN Del Soldato, Piero; Sannicolo', Francesco

PA Nicox S.A., Fr.; Del Soldato, Piero; Sannicolo', Francesco

SO PCT Int. Appl., 93 pp.  
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9809948	A2	19980312	WO 1997-EP4774	19970902
	WO 9809948	A3	19980604		
	W:	AL, AU, BB, BG, BR, CA, CN, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LK, LR, LT, LV, MG, MK, MN, MW, NO, NZ, PL, RO, RU, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
	AU 9743010	A1	19980326	AU 1997-43010	19970902
	AU 729533	B2	20010201		
	EP 931065	A2	19990728	EP 1997-919021	19970902
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, SI, LT, FI, RO			
	BR 9712008	A	19990824	BR 1997-12008	19970902
	CN 1234792	A	19991110	CN 1997-199130	19970902
	JP 2000517332	T2	20001226	JP 1998-512226	19970902
PRAI	IT 1996-MI1821	A	19960904		
	WO 1997-EP4774	W	19970902		
OS	MARPAT	128:217188			

=> d his

(FILE 'HOME' ENTERED AT 12:43:00 ON 17 OCT 2002)

FILE 'REGISTRY' ENTERED AT 12:44:28 ON 17 OCT 2002

L1	51 S INDOMETHACIN
L2	75 S NAPROXEN
L3	6 S NIMESULIDE
L4	13 S NITROGLYCERIN
L5	443 S NITRIC OXIDE

FILE 'CAPLUS' ENTERED AT 12:48:44 ON 17 OCT 2002

E MICTURITION

L6 861 S E3-E6  
E BLADDER  
L7 24458 S E3  
E INCONTINENCE  
L8 2013 S E3-E7  
E URINARY  
L9 107957 S E3  
L10 6048 S L4  
L11 76683 S L5  
L12 1 S L6 AND L10  
L13 27 S L6 AND L11  
E DETRUSOR  
L14 966 S E3-E6  
L15 1 S L14 AND L10  
L16 38 S L14 AND L11  
L17 31 S L16 NOT L13  
L18 10 S L8 AND L10  
L19 21 S L8 AND L11  
L20 16 S L19 NOT L18  
L21 757 S L9 AND L11  
L22 3 S L21 AND L1  
L23 12239 S L1  
L24 7053 S L2  
L25 553 S L3  
L26 17 S L23 AND L14  
L27 0 S L24 AND L14  
L28 0 S L25 AND L14  
L29 3 S L8 AND L24  
L30 2 S L8 AND L25

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---Logging off of STN---

=>

Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	163.83	199.02
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-9.29	-9.29

STN INTERNATIONAL LOGOFF AT 13:26:59 ON 17 OCT 2002

AN 110:185899 CA  
TI Pharmacological studies on the micturition reflex (2). Effects of various drugs on bladder and urethral functions in rats and dogs  
AU Morikawa, Koji; Kakiuchi, Masato; Yamauchi, Tosie; Hashimoto, Shigeki; Miyashita, Naoshi; Sawada, Youko; Kato, Hideo; Ito, Yasuo  
CS Cent. Res. Lab., Hokuriku Seiyaku Co., Ltd., Katsuyama, 911, Japan  
SO Oyo Yakuri (1989), 37(1), 27-37  
CODEN: OYYAA2; ISSN: 0300-8533  
DT Journal  
LA English  
CC 1-11 (Pharmacology)  
Section cross-reference(s): 2  
AB This study was undertaken in an attempt to examine the effects on the cystometrogram of i.v. administration of twelve drugs which influence the rhythmic bladder contraction in anesthetized rats and the effects on urethral pressure in both anesthetized rats and dogs. In the cystometrogram of both rats and dogs, thiopental, diazepam, baclofen, morphine, clonidine, verapamil, indomethacin, lidocaine and flavoxate (considered to act directly on the micturition centers in the sacral cord and/or brain stem or the bladder mechanoreceptors) increased the time required to cause micturition and the pressure threshold. Isoproterenol, which is thought to act indirectly on the bladder mechanoreceptors by suppressing the bladder tonus, increased the bladder capacity, but did not increase the pressure threshold. Atropine and hexamethonium, considered to act on the muscarinic receptors in the pelvic ganglion, suppressed the amplitude of the micturition contraction, but did not increase the bladder capacity or pressure threshold. On the other hand, clonidine, hexamethonium and isoproterenol decreased the maximal urethral pressure in dogs, but no other drugs had any effect on the pressure. The effect of clonidine was inhibited by bilateral transections of the hypogastric nerves; this suggests that clonidine acts on the urethral smooth muscle through the central nervous system.  
ST micturition reflex drug; bladder function drug; urethra function drug  
IT Bladder  
Urethra  
    (function of, drugs effect on, micturition reflex in)  
IT Reflex  
    (micturition, drugs effect on, bladder and urethra function in)  
IT 51-55-8, Atropine, biological studies 52-53-9, Verapamil 53-86-1, Indomethacin 57-27-2, Morphine, biological studies 60-25-3, Hexamethonium chloride 76-75-5, Thiopental 137-58-6, Lidocaine 439-14-5, Diazepam 1134-47-0, Baclofen 4205-90-7, Clonidine 7683-59-2, Isoproterenol 15301-69-6, Flavoxate  
RL: BIOL (Biological study)  
    (micturition reflex response to, bladder and urethra function in)  
IT 51-45-6, Histamine, biological studies 58-73-1, Diphenhydramine 59-42-7, 1-Phenylephrine 60-31-1, Acetylcholine chloride 146-48-5, Yohimbine 551-11-1, Prostaglandin F2.alpha. 971-74-4, Serotonin creatinine sulfate 19216-56-9, Prazosin  
RL: BIOL (Biological study)  
    (micturition reflex response to, urethra function response in)

AN 1996:447425 CAPLUS  
DN 125:105692  
TI Effects of nitric oxide on **detrusor** relaxation  
AU Chung, Byung Ha; Choi, Seung Kang; Chang, Ki Churl  
CS College Medicine, Yonsei University, Seoul, S. Korea  
SO Journal of Urology (Baltimore) (1996), 155(6), 2090-2093  
CODEN: JOURAA; ISSN: 0022-5347  
PB Williams & Wilkins  
DT Journal  
LA English  
CC 2-8 (Mammalian Hormones)  
AB This study was designed to characterize the effect of NO, exploiting the photo-induced adequate NP (PIANO) system, on rat **detrusor** relaxation by isometric tension recording and measuring changes in cGMP content. Exposure to UV light was used (1-60 s) to evoke PIANO in the presence of streptozotocin, an NO carrier, and N.omega.-nitro-L-arginine (L-NOARG), an NO<sub>2</sub>-carrier. During relaxation the cGMP content was measured by RIA. Rat **detrusor** strips were reversibly relaxed upon NO generation via PIANO. Pyrogallol, an O<sub>2</sub> generator, significantly diminished PIANO-mediated relaxation. During PIANO-mediated relaxation, the tissue level of cGMP significantly increased over that of the control. Furthermore, methylene blue, a guanylate cyclase inhibitor, significantly inhibited both the relaxation and the increase of cGMP. Thus, the rat **detrusor** muscle is capable of responding to NO, and these findings might lead to a treatment for bladder instability and **detrusor** hyperreflexia by the use of intravesical instillation of NO donors.  
ST nitric oxide **detrusor** muscle relaxation; bladder relaxation cGMP  
nitric oxide  
IT Bladder  
    (**detrusor** muscle, effects of nitric oxide on **detrusor**  
    muscle relaxation and cGMP)  
IT 7782-44-7, Oxygen, biological studies  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
    (effects of nitric oxide and oxygen on **detrusor** muscle  
    relaxation and cGMP)  
IT 10102-43-9, Nitric oxide, biological studies  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
    (effects of nitric oxide on **detrusor** muscle relaxation and  
    cGMP)  
IT 7665-99-8, CGMP  
RL: BOC (Biological occurrence); BSU (Biological study, unclassified);  
BIOL (Biological study); OCCU (Occurrence)  
    (effects of nitric oxide on **detrusor** muscle relaxation and  
    cGMP)

=>

AN 1996:447425 CAPLUS  
DN 125:105692  
TI Effects of nitric oxide on **detrusor** relaxation  
AU Chung, Byung Ha; Choi, Seung Kang; Chang, Ki Churl  
CS College Medicine, Yonsei University, Seoul, S. Korea  
SO Journal of Urology (Baltimore) (1996), 155(6), 2090-2093  
CODEN: JOURAA; ISSN: 0022-5347  
PB Williams & Wilkins  
DT Journal  
LA English  
CC 2-8 (Mammalian Hormones)  
AB This study was designed to characterize the effect of NO, exploiting the photo-induced adequate NP (PIANO) system, on rat **detrusor** relaxation by isometric tension recording and measuring changes in cGMP content. Exposure to UV light was used (1-60 s) to evoke PIANO in the presence of streptozotocin, an NO carrier, and N.omega.-nitro-L-arginine (L-NOARG), an NO<sub>2</sub>-carrier. During relaxation the cGMP content was measured by RIA. Rat **detrusor** strips were reversibly relaxed upon NO generation via PIANO. Pyrogallol, an O<sub>2</sub> generator, significantly diminished PIANO-mediated relaxation. During PIANO-mediated relaxation, the tissue level of cGMP significantly increased over that of the control. Furthermore, methylene blue, a guanylate cyclase inhibitor, significantly inhibited both the relaxation and the increase of cGMP. Thus, the rat **detrusor** muscle is capable of responding to NO, and these findings might lead to a treatment for bladder instability and **detrusor** hyperreflexia by the use of intravesical instillation of NO donors.  
ST nitric oxide **detrusor** muscle relaxation; bladder relaxation cGMP  
nitric oxide  
IT Bladder  
(**detrusor** muscle, effects of nitric oxide on **detrusor**  
muscle relaxation and cGMP)  
IT 7782-44-7, Oxygen, biological studies  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(effects of nitric oxide and oxygen on **detrusor** muscle  
relaxation and cGMP)  
IT 10102-43-9, Nitric oxide, biological studies  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(effects of nitric oxide on **detrusor** muscle relaxation and  
cGMP)  
IT 7665-99-8, cGMP  
RL: BOC (Biological occurrence); BSU (Biological study, unclassified);  
BIOL (Biological study); OCCU (Occurrence)  
(effects of nitric oxide on **detrusor** muscle relaxation and  
cGMP)

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AN 1992:445429 CAPLUS  
DN 117:45429  
TI Nitric oxide and relaxation of pig lower urinary tract  
AU Persson, Katarina; Andersson, Karl Erik  
CS Dep. Clin. Pharmacol., Lund Univ. Hosp., Lund, 221 85, Swed.  
SO British Journal of Pharmacology (1992), 106(2), 416-22  
CODEN: BJPCBM; ISSN: 0007-1188  
DT Journal  
LA English  
CC 13-6 (Mammalian Biochemistry)  
AB The authors studied the non-adrenergic, non-cholinergic (NANC) nerve-mediated relaxation induced by elec. stimulation in pig isolated lower urinary tract smooth muscle, and the possible involvement of the L-arginine (L-ARG)/nitric oxide (NO) pathway in this response. Trigonal strips, precontracted by noradrenaline (NA), carbachol, or endothelin-1 (ET-1), relaxed frequency-dependently in response to elec. stimulation. Max. relaxation was obtained at 6-8 Hz, and amounted to 56, 77, and 62% of the agonist-induced tension in preps. contracted by NA, carbachol, or ET-1, resp. Exposure to NG-nitro-L-arginine (L-NOARG; 10<sup>-7</sup>-10<sup>-5</sup> M) concn.-dependently reduced the relaxant response in preps. contracted by NA. L-NOARG (10<sup>-6</sup> M) reduced the maximal response to 51% of control. L-NOARG (10<sup>-5</sup> M) abolished all relaxation, and unmasked a contractile component; D-NOARG had no effect. Also in trigonal preps., where the tension had been raised by carbachol or ET-1, L-NOARG (10<sup>-5</sup> M) markedly reduced relaxations evoked by elec. stimulation. In trigonal preps. contracted by NA, maximal relaxation was increased after pretreatment with L-ARG (10<sup>-3</sup> M), and the inhibitory effect of L-NOARG (10<sup>-6</sup> M) was prevented. Incubation of the trigonal strips with methylene blue had no effect on relaxations elicited at frequencies <6 Hz, but a small inhibition was obsd. at higher frequencies. Administration of NO (present in acidified soln. of NaNO<sub>2</sub>) induced concn.-dependent relaxations in trigonal preps. contracted by NA, carbachol, or ET-1. L-NOARG (10<sup>-5</sup> M) and L-ARG (10<sup>-3</sup> M) had no effect on these relaxations. However, methylene blue (10<sup>-5</sup> M) shifted the concn.-response curve for NO to the right. NANC-relaxation and NO-induced relaxation of trigonal preps. were both inhibited by oxyHb (10<sup>-5</sup> M) and pyrogallol (10<sup>-4</sup> M). In urethral preps. precontracted by NA, elec. stimulation caused frequency-dependent relaxations. A max. relaxation of 73% was obtained at 10 Hz. Also in the urethra, NANC-relaxation was blocked by L-NOARG (10<sup>-5</sup> M), and a contractile response generally appeared. **Detrusor** strips treated with .alpha.-.beta. methylene ATP (10<sup>-5</sup> M) and atropine (10<sup>-6</sup> M), and then contracted by ET-1, showed relaxations (19% of the induced tension) in response to elec. field stimulation (2-20 Hz) only when the tension was high. No response at all, or small contractions, were found in response to elec. stimulation in K<sup>+</sup> (35 mM)-contracted **detrusor** strips. **Detrusor** preps. contracted by carbachol were concn.-dependently relaxed by exogenously administered NO, SIN-1 (NO-donor), and isoprenaline, whereas vasoactive intestinal polypeptide had minor effects. NO and SIN-1 induced maximal relaxations of 63 and 70%, resp., of the tension induced by carbachol. Isoprenaline produced an almost complete relaxation (96%). Thus, NANC-nerve mediated relaxation, involving the L-ARG/NO pathway, can be demonstrated consistently in the pig trigonal and urethral, but not in **detrusor** smooth muscle.  
ST nitric oxide urinary tract muscle  
IT Urethra  
    (relaxation of smooth muscle of, nonadrenergic-noncholinergic neurotransmission-induced, nitric oxide in)  
IT Neuromuscular transmission  
    (nonadrenergic-noncholinergic, urinary tract smooth muscle relaxation induction by, nitric oxide in)  
IT Bladder  
    (trigone, relaxation of smooth muscle of, nonadrenergic-noncholinergic

neurotransmission-induced, nitric oxide in)  
IT 10102-43-9, Nitric oxide, biological studies  
RL: BIOL (Biological study)  
(in nonadrenergic-noncholinergic neurotransmission-induced relaxation  
of urinary tract smooth muscle)

=>

(FILE 'HOME' ENTERED AT 12:43:00 ON 17 OCT 2002)

FILE 'REGISTRY' ENTERED AT 12:44:28 ON 17 OCT 2002

L1           51 S INDOMETHACIN  
L2           75 S NAPROXEN  
L3           6 S NIMESULIDE  
L4           13 S NITROGLYCERIN  
L5          443 S NITRIC OXIDE

FILE 'CAPLUS' ENTERED AT 12:48:44 ON 17 OCT 2002

             E MICTURITION  
L6        861 S E3-E6  
             E BLADDER  
L7      24458 S E3  
             E INCONTINENCE  
L8      2013 S E3-E7  
             E URINARY  
L9     107957 S E3  
L10    6048 S L4  
L11   76683 S L5  
L12    1 S L6 AND L10  
L13   27 S L6 AND L11  
             E DETRUSOR  
L14   966 S E3-E6  
L15   1 S L14 AND L10  
L16   38 S L14 AND L11  
L17   31 S L16 NOT L13  
L18   10 S L8 AND L10  
L19   21 S L8 AND L11  
L20   16 S L19 NOT L18  
L21   757 S L9 AND L11  
L22   3 S L21 AND L1

=>

DN 125:82655  
TI Characterization of nitric oxide synthase activity in sheep urinary tract:  
functional implications  
AU Garcia-Pascual, A.; Costa, G.; Labadia, A.; Persson, K.; Triguero, D.  
CS Faculty of Veterinary Sciences, Complutense University, Madrid, 28040,  
Spain  
SO British Journal of Pharmacology (1996), 118(4), 905-914  
CODEN: BJPCBM; ISSN: 0007-1188  
PB Stockton  
DT Journal  
LA English  
CC 13-1 (Mammalian Biochemistry)  
AB To define further the role of NO in urinary tract function, the authors measured the presence of nitric oxide synthase (NOS) activity, and its relation with functional NO-mediated responses to elec. field stimulation (EFS) in the urethra, the bladder detrusor muscle, and the ureter from sheep. NOS activity was assayed by the conversion of L-[14C]-arginine to L-[14C]-citrulline. Endogenous prodn. of citrulline was confirmed by TLC. NOS activity was detected in the cytosolic fraction from tissue homogenates with the following regional distribution (pmol citrulline/mg protein/min): urethra (33 .+-. 3.3), detrusor (13.1 .+-. 1.1) and ureter (1.5 .+-. 0.2). No activity was detected in the particulate fraction of any region. NOS activity was dependent on Ca<sup>2+</sup>-calmodulin and required exogenously added NADPH and tetrahydrobiopterin (BH4) for maximal activity. Exclusion of calmodulin from the incubation mixt. did not modify NOS activity, but it was significantly reduced in the presence of the calmodulin antagonist, calmidazolium, suggesting the presence of enough endogenous calmodulin to sustain the obsd. NOS activity. NOS activity was inhibited to a greater extent by NG-nitro-L-arginine (L-NOARG) and its Me ester (L-NAME) than by NG-monomethyl-L-arginine (L-NMMA), whereas 7-nitroindazole (7-NI) was a weak inhibitor, and L-canavanine had no effect. Citrulline formation could be inhibited by superoxide dismutase in an oxyHb-sensitive manner, suggesting feedback inhibition of NOS by NO. EFS induced prominent NO-mediated relaxations in the urethra, whereas minor or no responses were obsd. in the detrusor and the ureter, resp. Urethral relaxations to EFS were inhibited by NOS inhibitors with the rank order of potency: L-NOARG = L-NAME > 7-NI > L-NMMA. Thus, the presence of NO-synthesizing enzyme activity in the sheep urinary tract was demonstrated which showed similar characteristics to the constitutive NOS isoform found in brain. It is suggested that the enzymic activity measured in the urethral muscle layer may account for the NO-mediated urethral relaxation during **micturition**, whereas regulation of detrusor and ureteral motor function by NOS-contg. nerves is less likely.  
ST nitric oxide synthase distribution urinary tract  
IT Ureter  
Urethra  
(distribution and characterization of nitric oxide synthase activity in sheep urinary tract and its functional implications)  
IT Bladder  
(detrusor muscle, distribution and characterization of nitric oxide synthase activity in sheep urinary tract and its functional implications)  
IT 125978-95-2, Nitric oxide synthase  
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)  
(distribution and characterization of nitric oxide synthase activity in sheep urinary tract and its functional implications)

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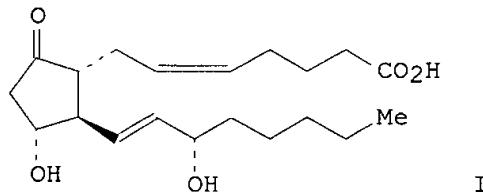
AN 1992:77163 CAPIUS  
DN 116:77163  
TI Inhibition of the arginine/nitric oxide pathway causes bladder hyperactivity in the rat  
AU Persson, K.; Igawa, Y.; Mattiasson, A.; Andersson, K. E.  
CS Dep. Clin. Pharmacol., Lund Univ. Hosp., Lund, 221 85, Swed.  
SO Acta Physiologica Scandinavica (1992), 144(1), 107-8  
CODEN: APSCAX; ISSN: 0001-6772  
DT Journal  
LA English  
CC 2-10 (Mammalian Hormones)  
Section cross-reference(s): 14  
AB The present expts. demonstrate that inhibition of the L-arginine/nitric oxide pathway leads to bladder hyperactivity and decreased bladder capacity. This suggests that continuous activity in this pathway is one of the factors keeping the bladder relaxed during filling. The NANC-mediated relaxant response to elec. stimulation found previously in vitro in the trigone and the urethra of several species, but not in the **detrusor** muscle, may reflect the localization of such activity, and lends support to the view that bladder hyperactivity (unstable **detrusor** contractions) may be initiated from the bladder outlet region.  
ST bladder hyperactivity arginine nitric oxide control  
IT Bladder  
    (disease, hyperactivity, arginine/nitric oxide pathway in pathophysiol.  
    of)  
IT 10102-43-9, Nitric oxide, biological studies  
RL: BIOL (Biological study)  
    (arginine pathway, in control of bladder hyperactivity, pathophysiol.  
    in relation to)  
IT 74-79-3, L-Arginine, biological studies  
RL: BIOL (Biological study)  
    (nitric oxide pathway, in control of bladder hyperactivity,  
    pathophysiol. in relation to)

DN 118:252196  
TI Partial mediation by nitric oxide of the relaxation of human isolated **detrusor** strips in response to electrical field stimulation  
AU James, M. J.; Birmingham, A. T.; Hill, S. J.  
CS Med. Sch., Univ. Nottingham, Nottingham, NG7 2UH, UK  
SO British Journal of Clinical Pharmacology (1993), 35(4), 366-72  
CODEN: BCPHBM; ISSN: 0306-5251  
DT Journal  
LA English  
CC 13-6 (Mammalian Biochemistry)  
AB A method for reproducing relaxation of human isolated **detrusor** smooth muscle in vitro in response to elec. field stimulation is described. The parameters of stimulation assocd. with relaxation were those which would be expected to give a largely nerve-mediated response: the relaxations were not reduced by tetrodotoxin (3 .times. 10<sup>-7</sup> M) and were therefore not dependent on voltage sensitive sodium channels. The relaxations were decreased (mean 74.1%) by nitro L-arginine (NOARG, 10<sup>-5</sup> M). Methylene blue (10<sup>-5</sup> M), an inhibitor of sol. guanylate cyclase, abolished the relaxations. These results indicate that there may be a relaxation mechanism in the human bladder which is at least partly mediated via the prodn. of nitric oxide.  
ST nitric oxide **detrusor** muscle bladder relaxation  
IT Bladder  
    (relaxation in, nitric oxide mediation of)  
IT Bladder  
    (**detrusor** muscle, nitric oxide mediation of relaxation of, in human bladder)  
IT 10102-43-9, Nitric oxide, biological studies  
RL: BIOL (Biological study)  
    (role in human bladder relaxation)

AN 1996:447425 CAPLUS  
DN 125:105692  
TI Effects of nitric oxide on **detrusor** relaxation  
AU Chung, Byung Ha; Choi, Seung Kang; Chang, Ki Churl  
CS College Medicine, Yonsei University, Seoul, S. Korea  
SO Journal of Urology (Baltimore) (1996), 155(6), 2090-2093  
CODEN: JOURAA; ISSN: 0022-5347  
PB Williams & Wilkins  
DT Journal  
LA English  
CC 2-8 (Mammalian Hormones)  
AB This study was designed to characterize the effect of NO, exploiting the photo-induced adequate NP (PIANO) system, on rat **detrusor** relaxation by isometric tension recording and measuring changes in cGMP content. Exposure to UV light was used (1-60 s) to evoke PIANO in the presence of streptozotocin, an NO carrier, and N.omega.-nitro-L-arginine (L-NOARG), an NO<sub>2</sub>-carrier. During relaxation the cGMP content was measured by RIA. Rat **detrusor** strips were reversibly relaxed upon NO generation via PIANO. Pyrogallol, an O<sub>2</sub> generator, significantly diminished PIANO-mediated relaxation. During PIANO-mediated relaxation, the tissue level of cGMP significantly increased over that of the control. Furthermore, methylene blue, a guanylate cyclase inhibitor, significantly inhibited both the relaxation and the increase of cGMP. Thus, the rat **detrusor** muscle is capable of responding to NO, and these findings might lead to a treatment for bladder instability and **detrusor** hyperreflexia by the use of intravesical instillation of NO donors.  
ST nitric oxide **detrusor** muscle relaxation; bladder relaxation cGMP  
nitric oxide  
IT Bladder  
(**detrusor** muscle, effects of nitric oxide on **detrusor**  
muscle relaxation and cGMP)  
IT 7782-44-7, Oxygen, biological studies  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(effects of nitric oxide and oxygen on **detrusor** muscle  
relaxation and cGMP)  
IT 10102-43-9, Nitric oxide, biological studies  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(effects of nitric oxide on **detrusor** muscle relaxation and  
cGMP)  
IT 7665-99-8, CGMP  
RL: BOC (Biological occurrence); BSU (Biological study, unclassified);  
BIOL (Biological study); OCCU (Occurrence)  
(effects of nitric oxide on **detrusor** muscle relaxation and  
cGMP)

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DN 88:146643  
TI Interactions of calcium, prostaglandins and indomethacin on the smooth muscle of the bladder  
AU Anderson, Gordon F.; Kohn, Kenneth I.  
CS Dep. Pharmacol., Wayne State Univ. Sch. Med., Detroit, Mich., USA  
SO Pharmacology (1978), 16(6), 306-13  
CODEN: PHMGBN; ISSN: 0031-7012  
DT Journal  
LA English  
CC 2-5 (Hormone Pharmacology)  
GI



AB The effects of PGE<sub>2</sub> (I) [363-24-6], PGF<sub>2</sub>.alpha. [551-11-1] and indomethacin (II) [53-86-1] were studied on isolated rabbit detrusor smooth muscle strips in balanced salt soln. and in 80 mM K<sup>+</sup> depolarizing soln. The addn. of II to the smooth muscle prepns. at 0.1-1.0 .mu.M produced depression of spontaneous motility that was partially antagonized by I or by elevating the extracellular Ca<sup>2+</sup> level. Alone, both I and Ca<sup>2+</sup> caused a marked increase in motility, increasing both frequency and amplitude. In low Ca<sup>2+</sup>, K<sup>+</sup> depolarized bathing medium with 0.1 mM EGTA added, I or PGF<sub>2</sub>.alpha. augmented Ca<sup>2+</sup> contractures both in velocity and amplitude, whereas either prostaglandin without Ca<sup>2+</sup> had no effect on the smooth muscle. II produced a noncompetitive antagonism of the Ca<sup>2+</sup> dose response curve in 80 mM K<sup>+</sup> depolarized prepns. suggesting a direct effect on Ca<sup>2+</sup> flux. II also depressed both prostaglandin and Ca<sup>2+</sup> contractures in terms of velocity and magnitude, suggesting that it may act at Ca<sup>2+</sup> channels in addn. to its action on prostaglandin synthetase. These data support the work of others who suggest that prostaglandins may augment Ca<sup>2+</sup> permeability, acting at the Ca<sup>2+</sup> channel or as carriers for Ca<sup>2+</sup> across smooth muscle cell membrane.

ST calcium indomethacin prostaglandin bladder

IT Bladder

(contraction of, calcium and indomethacin and prostaglandin interaction in)

IT 363-24-6 551-11-1

RL: BIOL (Biological study)

(bladder response to, calcium and indomethacin interaction in)

IT 53-86-1

RL: BIOL (Biological study)

(bladder response to, calcium and prostaglandins interaction in)

IT 7440-70-2, biological studies

RL: BIOL (Biological study)

(bladder response to, indomethacin and prostaglandins interaction in)

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AN 1995:980141 CAPLUS  
DN 124:106940  
TI The effects of an estradiol transdermal therapeutic system, alone and in combination with naproxen, on urge **incontinence** in elderly women: A pilot study  
AU Blom, Marie W.; Sommers, De Klerk  
CS Faculty Medicine, University Pretoria, Pretoria, 0001, S. Afr.  
SO Current Therapeutic Research (1995), 56(10), 1100-4  
CODEN: CTCEA9; ISSN: 0011-393X  
PB Excerpta Medica  
DT Journal  
LA English  
CC 2-4 (Mammalian Hormones)  
Section cross-reference(s): 63  
AB The aim of this study was to evaluate the effects of a transdermal estradiol delivery system, alone and in combination with naproxen, in elderly women with confirmed urge **incontinence**. An open-label, single-blind pilot study was conducted in which an estradiol transdermal therapeutic system (TTS) alone, or combined with naproxen 250-mg tablets twice daily, or placebo TTS were given according to a randomized, crossover design for a period of 8 wk. Cystometric examn. was performed after each medication session. A washout period of 2 wk followed each medication session. Bladder-diary charts were completed by each patient and evaluated as a subjective measure of that patient's symptoms esp. with regard to frequency of urination, nocturia, and episodes of **incontinence**. Sixteen participants completed the study.  
Estradiol TTS as well as estradiol TTS plus naproxen increased bladder capacity significantly ( $P < 0.05$ ) when compared with placebo. The vol. at which the first urge to void was perceived was increased significantly ( $P = 0.01$ ) by estradiol TTS plus naproxen compared with placebo. These results suggest that estrogen alleviates urge **incontinence**.  
ST estradiol naproxen urine urge **incontinence**  
IT Bladder  
(disease, **incontinence**, urge; effects of estradiol transdermal therapeutic system, alone and in combination with naproxen, on urge **incontinence** in elderly women)  
IT Pharmaceutical dosage forms  
(transdermal, effects of estradiol transdermal therapeutic system, alone and in combination with naproxen, on urge **incontinence** in elderly women)  
IT 50-28-2, Estradiol, biological studies 22204-53-1, Naproxen  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(effects of estradiol transdermal therapeutic system, alone and in combination with naproxen, on urge **incontinence** in elderly women)

=>

AN 1993:509502 CAPLUS  
DN 119:109502  
TI Nitric oxide mediates nonadrenergic, noncholinergic relaxation of the smooth muscle sphincter of the urinary bladder  
AU Thornbury, K. D.; Hollywood, M. A.; McHale, N. G.  
CS Sch. Biomed. Sci., Queen's Univ., Belfast, BT9 7BL, UK  
SO Biol. Nitric Oxide, Proc. Int. Meet., 2nd (1992), Meeting Date 1991, Volume 1, 309-12. Editor(s): Moncada, Salvador. Publisher: Portland Press, London, UK.  
CODEN: 59AFA7  
DT Conference  
LA English  
CC 2-8 (Mammalian Hormones)  
AB The results of the present study demonstrate that nonadrenergic-noncholinergic (NANC) relaxation and after-contraction in the smooth muscle sphincter of the bladder depend on synthesis and release of NO or a closely related compd. The demonstration that relaxation of the internal sphincter is antagonized by the NO synthase inhibitor, L-NAME, provides an opportunity to assess the role of inhibitory NANC nerves in vivo, and may improve understanding of clin. conditions such as stress **incontinence**, urge **incontinence** and urinary retention.  
ST bladder relaxation nonadrenergic noncholinergic nitric oxide  
IT Bladder (nonadrenergic noncholinergic relaxation of, nitric oxide mediation of)  
IT Nervous system (nonadrenergic-noncholinergic, bladder relaxation by, nitric oxide mediation of)  
IT 10102-43-9, Nitric oxide, biological studies  
RL: BIOL (Biological study)  
(nonadrenergic noncholinergic bladder relaxation mediation by)

=>

AN 1993:509502 CAPLUS  
DN 119:109502  
TI Nitric oxide mediates nonadrenergic, noncholinergic relaxation of the smooth muscle sphincter of the urinary bladder  
AU Thornbury, K. D.; Hollywood, M. A.; McHale, N. G.  
CS Sch. Biomed. Sci., Queen's Univ., Belfast, BT9 7BL, UK  
SO Biol. Nitric Oxide, Proc. Int. Meet., 2nd (1992), Meeting Date 1991,  
Volume 1, 309-12. Editor(s): Moncada, Salvador. Publisher: Portland  
Press, London, UK.  
CODEN: 59AFA7  
DT Conference  
LA English  
CC 2-8 (Mammalian Hormones)  
AB The results of the present study demonstrate that nonadrenergic-noncholinergic (NANC) relaxation and after-contraction in the smooth muscle sphincter of the bladder depend on synthesis and release of NO or a closely related compd. The demonstration that relaxation of the internal sphincter is antagonized by the NO synthase inhibitor, L-NAME, provides an opportunity to assess the role of inhibitory NANC nerves in vivo, and may improve understanding of clin. conditions such as stress **incontinence**, urge **incontinence** and urinary retention.  
ST bladder relaxation nonadrenergic noncholinergic nitric oxide  
IT Bladder  
    (nonadrenergic noncholinergic relaxation of, nitric oxide mediation of)  
IT Nervous system  
    (nonadrenergic-noncholinergic, bladder relaxation by, nitric oxide mediation of)  
IT **10102-43-9**, Nitric oxide, biological studies  
RL: BIOL (Biological study)  
    (nonadrenergic noncholinergic bladder relaxation mediation by)

=>

AN 1996:551707 CAPLUS  
DN 125:239097  
TI The effect of NG-monomethyl-L-arginine on bladder function  
AU Theobald, Robert J. Jr.  
CS Department of Pharmacology, Kirksville College of Osteopathic Medicine,  
800 West Jefferson Street, Kirksville, Kirksville, USA  
SO European Journal of Pharmacology (1996), 311(1), 73-78  
CODEN: EJPHAZ; ISSN: 0014-2999  
PB Elsevier  
DT Journal  
LA English  
CC 2-8 (Mammalian Hormones)  
Section cross-reference(s): 13  
AB Recent studies have demonstrated the presence of nitric oxide synthase (NO synthase) in lower urinary tract tissues, however, its role in the detrusor is unclear. The current study was designed to det. if NO synthase inhibition alters detrusor activities, including **micturition** vol. threshold, and inhibition of pelvic nerve-evoked contractions by various stimuli. In naive, anesthetized adult cats, inhibition of pelvic nerve-evoked bladder contractions, induced by hypogastric nerve stimulation or the intraarterial administration of NA, ATP, adenosine, .beta.,.gamma.-methylene ATP and 2-methylthio ATP, was measured before and after inhibition of NO synthase. The **micturition** vol. threshold was also measured before and after NO synthase inhibition. L-NMMA decreased the **micturition** vol. threshold by 38% (2 mg intravesical administration) or 80% (4 mg/kg i.a.). The magnitude of the **micturition** contractions was modestly increased. These results, and information in the literature, indicate that NO may play a role in the collection phase of the bladder cycle and any alteration of nitric oxide availability could induce or allow development of various bladder malfunctions, such as small bladder diseases, like interstitial cystitis.  
ST nitric oxide synthase bladder function  
IT Bladder  
(nitric oxide synthase role in bladder function)  
IT 10102-43-9, Nitric oxide, biological studies 125978-95-2  
, Nitric oxide synthase  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(nitric oxide synthase role in bladder function)

=>

AN 1996:551707 CAPLUS  
DN 125:239097  
TI The effect of NG-monomethyl-L-arginine on bladder function  
AU Theobald, Robert J. Jr.  
CS Department of Pharmacology, Kirksville College of Osteopathic Medicine,  
800 West Jefferson Street, Kirksville, Kirksville, USA  
SO European Journal of Pharmacology (1996), 311(1), 73-78  
CODEN: EJPHAZ; ISSN: 0014-2999  
PB Elsevier  
DT Journal  
LA English  
CC 2-8 (Mammalian Hormones)  
Section cross-reference(s): 13  
AB Recent studies have demonstrated the presence of nitric oxide synthase (NO synthase) in lower urinary tract tissues, however, its role in the detrusor is unclear. The current study was designed to det. if NO synthase inhibition alters detrusor activities, including **micturition** vol. threshold, and inhibition of pelvic nerve-evoked contractions by various stimuli. In naive, anesthetized adult cats, inhibition of pelvic nerve-evoked bladder contractions, induced by hypogastric nerve stimulation or the intraarterial administration of NA, ATP, adenosine, .beta.,.gamma.-methylene ATP and 2-methylthio ATP, was measured before and after inhibition of NO synthase. The **micturition** vol. threshold was also measured before and after NO synthase inhibition. L-NMMA decreased the **micturition** vol. threshold by 38% (2 mg intravesical administration) or 80% (4 mg/kg i.a.). The magnitude of the **micturition** contractions was modestly increased. These results, and information in the literature, indicate that NO may play a role in the collection phase of the bladder cycle and any alteration of nitric oxide availability could induce or allow development of various bladder malfunctions, such as small bladder diseases, like interstitial cystitis.  
ST nitric oxide synthase bladder function  
IT Bladder  
    (nitric oxide synthase role in bladder function)  
IT 10102-43-9, Nitric oxide, biological studies 125978-95-2  
    , Nitric oxide synthase  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
    (nitric oxide synthase role in bladder function)

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